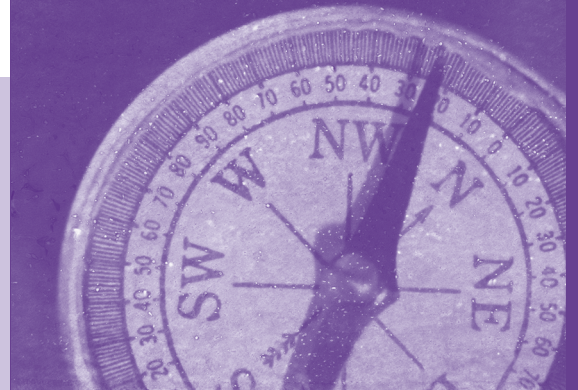


Special Report



EFFECTS OF THE VERMONT *Mental Health and Substance Abuse* PARITY LAW



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
Center for Mental Health Services
Center for Substance Abuse Treatment
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THE VERMONT
Mental Health and Substance Abuse
PARITY LAW

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Executive Summary

Vermont implemented the Nation's most comprehensive parity law in 1998, extending equality of health insurance coverage to both mental health and substance abuse (MH/SA) services. This evaluation sought to determine how implementation of parity in Vermont affected major stakeholders: employers, health plans, providers, and consumers. The evaluation included an implementation case study, an employer survey, and an analysis of health plan claims/encounter data. Much of the analysis focused on the experiences of two health plans—Kaiser/Community Health Plan (Kaiser/CHP) and Blue Cross/Blue Shield of Vermont (BCBSVT). These plans covered nearly 80 percent of the privately insured population at the time parity was implemented.

Major Findings

- Both health plans made changes in the way they managed mental health and substance abuse (MH/SA) services. Before parity, BCBSVT provided MH/SA services primarily through indemnity contracts; after parity, most members received MH/SA services through a managed care carve-out. In contrast, Kaiser/CHP had a managed care system prior to parity; following parity, the health plan implemented hospital diversion and step-down programs that increased the use of partial hospitalization treatment and group therapy and reduced the use of inpatient treatment.
- Only 0.3 percent of Vermont employers reported that they dropped health coverage for their employees mainly because of the parity law. Only 0.1 percent of employers reported that parity played a role in the decision to self-insure.
- More people received outpatient MH services following implementation of parity. The percentage of users per 1,000 members increased 6 to 8 percent across the two health plans.
- In contrast, fewer people received any SA treatment after parity was implemented. The percentage of users per 1,000 members decreased by 16 to 29 percent.
- Consumers paid a smaller share of the total amount spent on MH/SA services following implementation of parity. For example, the share paid out-of-pocket by BCBSVT members fell from 27 percent to 16 percent of total MH/SA spending. Among those with serious mental health conditions, the proportion spending more

than \$1,000 out-of-pocket annually was cut by more than half.

- Spending by BCBSVT for MH/SA services increased by 4 percent following implementation of parity. In other words, the amount spent by BCBSVT for MH/SA services increased 19 cents per member per month. Relative to BCBSVT spending for all services, MH/SA services accounted for 2.47 percent of the total after parity, up from 2.30 percent pre-parity.
- Cost data for Kaiser/CHP were more limited. However, it was estimated that health plan spending for MH/SA services decreased by 9 percent following parity. This appeared to be due primarily to decreases in utilization of SA treatment services.
- Managed care for MH/SA services was an important factor in controlling costs following implementation of parity. For those BCBSVT members who received their benefits through a carve-out, both the likelihood of obtaining MH treatment and the average number of outpatient MH visits per user declined.

- Both consumer and employer awareness of parity in Vermont was low. As a result, stakeholders felt that some difficulties could have been avoided if there had been a proactive education campaign concerning the law.

Conclusions

This study reflects experiences during the first 2 to 3 years of parity in Vermont. It is possible that a longer study period might yield different results. Further, the study is limited to a single State, and the results may not be generalizable to other States in which the mix of providers or services differs.

Despite these qualifications, the study shows that parity for MH/SA benefits was achieved in Vermont. Increased use of managed care helped make parity affordable but may have reduced access and utilization for some services and beneficiaries. Limited knowledge of the law complicated implementation for employers, providers, and consumers. Vermont stakeholders recommended that more attention be paid to education and other proactive efforts to better prepare for a change of this magnitude.



Introduction

Insurers historically have been reluctant to cover mental health and substance abuse (MH/SA) services on par with general medical and surgical services because of concerns about adverse selection and moral hazard (McGuire, 1981).¹ During the 1980s, many States enacted mandates requiring insurers to cover mental health services and to offer freedom of choice among providers. Concerns about underutilization of MH/SA services persist, however, because many insurance policies impose higher cost sharing or more restrictive benefit limits for MH/SA services than for general medical and surgical services.

In recent years, legislative activity designed to introduce parity in insurance coverage for MH/SA treatment has experienced a resurgence. The Federal Mental Health Parity Act of 1996 (P.L. 104-204), a limited parity law, prohibits different dollar limits for mental health services and general health care. It does not mandate that insurers provide mental health coverage, nor does it affect the terms and conditions of mental health coverage, such as coinsurance, cost sharing, deductibles, or service limits. Further, while the law covers mental illnesses, as defined by each health plan, it excludes substance abuse. The Federal law exempts health plans purchased directly

through the individual market, businesses with 50 or fewer employees, and businesses that demonstrate that the law resulted in a cost increase of at least 1 percent. Currently, the Federal law is scheduled to expire at the end of 2003.

As of August 2002, 33 states had enacted parity laws that surpassed the provisions of the Federal parity law (Exhibit I.1). Of these, 19 require full parity, while 14 call for limited parity (GAO, 2000; NCSL, 2001). Full parity laws mandate that mental health benefits be included in all group plans and require parity in all respects—dollar limits, service limits, and cost sharing. As displayed in Exhibit I.1, Vermont has the most comprehensive parity law in the Nation and is the only State that exceeds the Federal law on every dimension. (See Appendix A for the text of the Vermont parity law.) The Vermont law defines mental health conditions broadly (that is, coverage is not limited to selected conditions); covers substance abuse; and requires equal terms

¹ Adverse selection may result when those who are older or sicker opt to enroll in or continue insurance to a greater extent than those who are younger or healthier. Moral hazard may occur when reduced cost sharing through insurance coverage reduces the incentive for individuals to economize in their use of health care.

Exhibit I.1: Overview of State Mental Health/Substance Abuse Parity Laws That Exceed the Federal Parity Law, as of August 2002

	<i>Year Law or Amendment Enacted</i>	<i>Mandated Benefit^a</i>	<i>Broad Definition of Mental Illness^b</i>	<i>Covers Substance Abuse</i>
Total Number of States	33	30	12	14
Vermont	1997	✓	✓	✓
Arkansas	1997, 2001	✓	✓	
California	1999	✓		
Colorado	1997	✓		
Connecticut	1999	✓	✓	✓
Delaware	1998, 2001	✓		✓
Georgia	1998		✓	✓
Hawaii	1999	✓		
Illinois	2001	✓		
Indiana	1999, 2001	h		✓
Kansas	2001	✓		
Kentucky	2000		✓	✓
Louisiana	1999	✓	✓	
Maine	1995	j		
Maryland	1994	✓	✓	✓
Massachusetts	2000	✓		k
Minnesota	1995	l	✓	✓
Missouri	1999			✓
Montana	1999, 2001	✓		✓
Nebraska	1999	✓		
Nevada	1999	✓		
New Hampshire	1994	✓		
New Jersey	1999	✓		
New Mexico	2000	✓	✓	
North Carolina	1997	✓	✓	✓
Oklahoma	1999	✓		
Pennsylvania	1998	✓		
Rhode Island	1994, 2001	✓	✓	✓
South Carolina	2000	✓		✓
South Dakota	1998	✓		
Tennessee	1998	✓	✓	
Texas	1997	o		
Virginia	1999	✓		✓
Federal Mental Health Parity Act	1996		p	

Source: Adapted from Gitterman, Daniel, Richard Scheffler, Marcia Peck, Elizabeth Ciemans, and Darcy Gruttadaro. "A Decade of Mental Health Parity: The Regulation of Mental Health Insurance Parity in the United States, 1990–2000." NIMH Grant MH-18828-11. Berkeley: University of California, July 2000. Updated based on State parity legislative information from the General Accounting Office, "Mental Health Parity Act: Despite New Federal Standards, Mental Health Benefits Remain Limited," GAO/HEHS-00-95, May 2000; the National Association for the Mentally Ill (NAMI), August 2001; and the NCSL Health Policy Tracking Service "Mental Health Parity" brief, December 2001.

Exhibit I.1 continued

	<i>Prohibits Limits on Inpatient Days and Outpatient Visits^c</i>	<i>Requires Financial Parity^d</i>	<i>Covers Small Employers^e</i>	<i>Covers Policies or Employers Regardless of Cost Increases</i>
Total Number of States	23	27	17	25
Vermont	✓	✓	✓	✓
Arkansas	f	✓	✓	
California	✓	✓	✓	
Colorado	✓	✓	✓	✓
Connecticut	✓	✓	✓	✓
Delaware	✓	✓	✓	✓
Georgia		✓	✓	✓
Hawaii	✓	✓		
Illinois	g	✓		✓
Indiana	✓	✓	i	
Kansas	✓			✓
Kentucky	✓	✓		✓
Louisiana		✓		
Maine	✓	✓		✓
Maryland		✓	✓	✓
Massachusetts	✓	✓	✓	✓
Minnesota	✓	✓	✓	✓
Missouri			✓	✓
Montana	✓	✓	✓	✓
Nebraska	✓			✓
Nevada		m		
New Hampshire	✓	✓	✓	✓
New Jersey	✓	✓	✓	✓
New Mexico	✓	✓	✓	
North Carolina	✓	✓	i	✓
Oklahoma	✓			
Pennsylvania		n		✓
Rhode Island		✓	✓	✓
South Carolina	✓	✓	i	
South Dakota	✓		✓	✓
Tennessee				
Texas	✓	✓		✓
Virginia	✓	✓		✓
Federal Mental Health Parity Act				

^a A “mandated benefit” refers to State statutes that require health insurance policies to include certain benefit provisions. A typical provision states that a group health plan shall provide benefits for diagnosis and mental health treatment under the same terms and conditions as provided for physical illnesses. States that are not checked under this column have either a “mandated benefit offering” or a “mandated, if offered” provision. The “mandated benefit offering” provision requires sellers to offer certain types of mental health coverage, with the decision of whether to purchase coverage left to the buyers. Alabama,

Georgia, and Missouri have “mandated benefit offering” provisions. The “mandated, if offered” provision does not require the employer or insurer to offer mental health coverage; however, if the employer offers coverage, then the coverage must comply with parity provisions. Indiana, Kentucky, and Nebraska have “mandated, if offered” provisions.

^b “Broad definition of mental illness” is defined as encompassing all the disorders listed in the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Health Disorders* and/or the

Exhibit I.1 continued

International Classification of Diseases Manual. For States that are not checked in this column, some narrow their laws' scope by requiring coverage only for "biologically based" illness or "serious mental illness," most commonly defined as schizophrenia, bipolar disorder, obsessive-compulsive disorder, major depressive disorder, panic disorder, schizo-affective disorder, and delusional disorder. Alternatively, some States—as well as the Federal Mental Health Parity Act—allow health plans to define the scope of the mental health benefit.

- ^c States that are not checked in this column permit a disparity in the terms and conditions required for mental health coverage compared to other physical health conditions (for example, allowing a cap on the number of inpatient days and/or outpatient visits for mental health coverage that differs from that for other physical illnesses).
- ^d States that are not checked in this column permit a disparity between the cost sharing for mental health services and physical health services.
- ^e States that are not checked in this column exempt small employers, most commonly defined as employers with either 25 or fewer employees or 50 or fewer employees.
- ^f Arkansas: S. 716 (2001) prohibits health plans from imposing limits on coverage for mental health treatment offered by employers with 50 or fewer employees. This law allows groups of 51 or more employees to impose an annual maximum of 8 inpatient/partial hospitalization days together with 30 outpatient days.
- ^g Illinois: S. 1341 requires "group health benefit plans to provide coverage based upon medical necessity for the following treatment of mental illness in each calendar year: 45 days of inpatient treatment and 35

visits for outpatient treatment, including group and individual outpatient treatment, and prohibits a lifetime limit on the number of inpatient treatment days and outpatient visits covered by the plan. Plans must include the same amount limits, deductibles, copayments, and coinsurance factors for serious mental illness as for physical illness."

- ^h Indiana: Statute specifies a "mandated benefit" for State employee plans and a "mandated offering" for group and individual plans.
- ⁱ Indiana, North Carolina, and South Carolina: The parity statute applies to health plans offered to State employees.
- ^j Maine: The statute mandates coverage for group plans and requires a mandated offering for individual policies.
- ^k Massachusetts: Parity for substance abuse applies only in cases of co-occurring mental illness and substance abuse disorders.
- ^l Minnesota: The statute mandates coverage for health maintenance organizations (HMOs) and "mandated, if offered" for individual and group plans.
- ^m Nevada: Annual and lifetime dollar limits must be equal to other illnesses; cost sharing for copayments and coinsurance must not be more than 150 percent of out-of-pocket expenses for medical and surgical benefits.
- ⁿ Pennsylvania: Statute requires parity in annual and lifetime dollar limits but only specifies that cost sharing "must not prohibit access to care."
- ^o Texas: Statute requires "mandated benefits" for group and HMO plans and a "mandated offering" for groups of 50 or fewer.
- ^p The Federal Mental Health Parity Act allows health plans to define the covered illnesses.

and conditions with general health care for service limits and cost sharing.² Vermont's law covers its entire commercially insured population, with no exemptions for small businesses. The sole exception is self-insured groups, due to the Federal preemption under the Employee Retirement Income Security Act. In addition, the Vermont parity law does not apply to Medicare or Medicaid beneficiaries.

The Vermont law permits health plans to use managed care for coverage of MH/SA treatment, even if the plans continue to cover medical/surgical treatment on an indemnity basis. In addition, the law exempts out-of-network benefits provided through a point-of-service option from complying with the terms of parity. Thus, enrollees who go out of network may be subject to visit limits for MH/SA services, separate deductibles, and higher copayments or coinsurance.

A. Why Study the Effects of Parity in Vermont?

The enactment of full parity statutes remains controversial for several reasons. Employers and health plans are concerned that a more generous benefit package for MH/SA services may result in significant increases in health insurance costs. Providers and consumers are concerned that the introduction of parity benefits may accelerate the trend toward increased management of behavioral health services. Legislators, for their part, require more definitive information on the effects of

parity on health care access, utilization, and spending to make sound decisions.

Implementation of the Vermont Parity Act provides an important opportunity to study the effects of a full parity law on access, utilization, and spending for MH/SA services. As discussed earlier, Vermont has the most comprehensive parity law in the Nation. Moreover, the State presents an interesting context for studying the effects of parity because of the contrasting health plan environments in which parity is being implemented. Between the two dominant commercial health plans in Vermont, one had managed care both before and after parity, and one shifted a large share of its members from an indemnity plan to a managed care carve-out when parity was implemented. Previous literature has shown that the effects of benefit expansions vary across health plan arrangements and, in particular, that health plans switching from indemnity to managed care arrangements often experience net savings despite the expanded benefits (Goldman, McCulloch, & Sturm, 1998; Sturm, Goldman, & McCulloch, 1998).

This report presents the results of an evaluation of the effects of the Vermont Parity Act, sponsored by the Substance Abuse and Mental Health Services Administration. The Vermont Department of Banking, Insurance, Securities, and Health Care Administration, the agency charged with overseeing the implementation of MH/SA parity in Vermont, provided extensive in-kind support to this evaluation. This evaluation had three major objectives:

1. Document implementation of the Vermont parity law through a case study;
2. Quantify the effects of the parity law on access to, utilization of, and spending for MH/SA services through an analysis of

² Specifically, the Vermont parity law defines a mental health condition to mean "any condition or disorder involving mental illness or alcohol or substance abuse that falls under any of the diagnostic categories listed in the mental disorders section of the international classification of disease, as periodically revised."

claims/encounter data for two health plans; and

3. Assess the effects of parity on employers through a survey of Vermont employers.

The three components of the evaluation—case study, claims/encounter data analysis, and employer survey—provide a multifaceted view of the implementation and effects of the Vermont parity law from the perspective of key stakeholders.³

B. Conceptual Framework for This Evaluation

Exhibit I.2 presents a conceptual framework that guided the evaluation design and analysis. The framework illustrates the potential behavioral responses and outcomes of various stakeholders. Following implementation of parity, insurers and employers jointly determine the characteristics of employer-sponsored insurance, including care management strategies and financial provisions. Employers may respond to parity in various ways. They may decide not to offer coverage. They may shift to self-insured coverage to avoid the state parity provisions, pass additional premium costs on to employees, or choose a managed care product. Alternatively, they may change employee compensation levels to account for the costs of parity or change the structure of their workforce (such as downsizing) to reduce costs. The direction and magnitude of employer responses is a function of the actual or anticipated effects of parity on their health care costs.

³ In addition, the evaluation included focus groups with a convenience sample of providers and consumers. This report does not present the results of the provider and consumer focus groups. However, the case study findings presented in Chapter II include provider and consumer perspectives (along with those of other stakeholders) that were gathered in the site visits.

The effect of parity on providers depends on how insurers restructure provider networks, reimbursement policies, and utilization controls. These changes may affect provider treatment patterns that, in turn, may have a direct effect on health care spending and utilization, as well as an indirect effect on consumer experience.

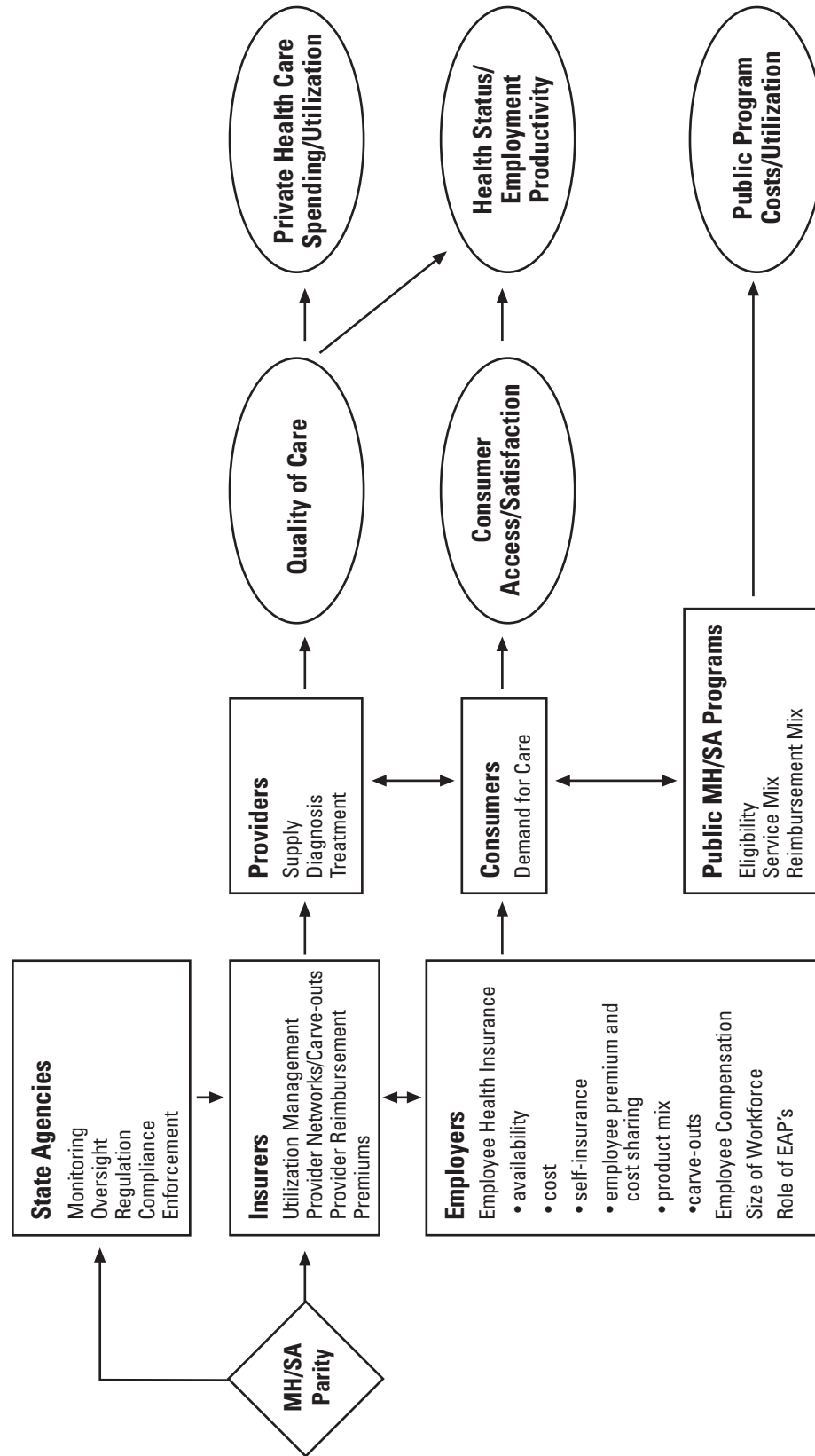
Consumer access and use is a function not only of enrollee characteristics (such as health status and risk) but also of such external factors as provider availability (as structured by the insurers) and employee cost sharing (as determined by the employer). Although parity is hypothesized to raise consumer demand by expanding insurance coverage, in reality, the effect on access to and use of services will depend on how insurers respond, particularly in terms of care management protocols. The conceptual framework identifies two intermediate consumer outcomes—access and satisfaction—and two ultimate outcomes—health status and productivity.

Finally, the framework incorporates effects on the public MH/SA system. Parity can affect public system costs if patients who would have been treated by publicly funded providers now are treated by privately funded providers, thus freeing up public resources, either for other MH/SA services (such as prevention) or for other public programs (health or nonhealth), or resulting in budget savings.

C. Questions Addressed in This Evaluation

The evaluation addresses both qualitative questions on the parity implementation process and quantitative questions on the effects of parity. The evaluation questions are organized around six domains:

Exhibit I.2: Conceptual Framework for Evaluating the Effects of Vermont's Mental Health/Substance Abuse (MH/SA) Parity Law



(1) implementation process; (2) employer issues; (3) insurer/health plan issues; (4) provider issues; (5) consumer issues; and (6) effects on health care access, utilization, and spending. Exhibit I.3 presents the questions addressed by the evaluation. Although the evaluation addresses a wide range of issues, some questions could not be addressed due to resource constraints. For example, this evaluation does not address the effects of parity on the quality of care or on health status and functioning. In addition, this study was unable to quantify the effects of parity on the public system, such as whether improved commercial benefits have resulted in fewer transitions to Medicaid or whether there have been any spillover effects on the State corrections system.

Findings from this study reflect experiences during the first two to three years of

parity in Vermont. It is possible that a longer study period might yield different results, especially as the effects of managed care transitions stabilize. This study also is limited to a single State, and the results may not be generalizable to other States in which the mix of providers or services differs.

D. Organization of This Report

This report contains four additional chapters. Chapter II describes the implementation of the Vermont parity law. Chapter III presents the results of the claims/encounter data analysis showing the effects of parity on access, utilization, and spending, and Chapter IV discusses the results of the employer survey. Chapter V synthesizes the major findings of this evaluation across the various study components.

Exhibit I.3: Questions Addressed by the Evaluation of the Vermont Parity Law

Implementation Process

- What mandates governed mental health/substance abuse (MH/SA) benefits prior to parity? What were the specific benefits and benefit limits for MH/SA for a typical health plan prior to the law? What specifically does the Vermont parity law require? What activities have taken place among the major stakeholders to implement, coordinate, and ensure compliance with the parity law? What obstacles, if any, were encountered? What modifications or clarifications were made during implementation? Do stakeholders feel that the law has achieved its objectives? If not, why not?

Health Plan Issues

- How has the parity law affected the scope of MH/SA coverage offered by health plans (for example, benefits and benefit limits)? Has the parity law affected the number of insurers in Vermont, especially in the individual and small group markets? Has the parity law affected the number of insurance products offered by Vermont insurers? How has implementation of the parity law varied among health plans (use of managed care, MH/SA carve-outs, utilization management, provider networks)?

Employer Issues

- What were employer responses to parity? Have employers responded to the parity mandate by increasing employee premiums, dropping coverage or benefits, or converting to self-insured plans? How do employer responses vary among small, medium, and large businesses? Have there been any effects on employers not subject to the mandate? How satisfied are employers with the parity law, and what recommendations do they have for improving the law in the future?

Provider Issues


- Has the parity law led to changes in how health plans contract with MH/SA providers? Has the parity law affected the mix of providers with which health plans contract? Has the parity law led to changes in how health plans reimburse MH/SA providers?

Consumer Issues

- Who provided consumer education about the changes brought about by the parity law? How knowledgeable are consumers about the parity provisions? How do consumer advocates view the results of the law, especially regarding consumer access to MH/SA services? Were there any unintended consequences?

Health Care Access, Utilization, and Spending

- How have access, utilization, and spending changed as a result of parity (such as percentage of covered population receiving any MH/SA service, intensity of care, MH/SA costs per covered life)? What types and amounts of services utilized post-parity would not have been covered pre-parity? Have characteristics of utilization changed following the implementation of parity? Who specifically is better off as a result of the law?



Implementation of Vermont's Mental Health/Substance Abuse Parity Law

Implementation of Vermont's mental health/substance abuse (MH/SA) parity law began in January 1998, a little more than 6 months after it was signed into law. The law resulted in significant changes in the nature of MH/SA coverage, particularly in terms of the increased use of managed care for MH/SA services. This chapter describes the early implementation experiences in Vermont—the transitions and challenges, and how stakeholders responded to those challenges. Such background information is key to understanding the effects of parity, as described in subsequent chapters, from the perspectives of health plans (Chapter III) and employers (Chapter IV).

The findings presented in this chapter are based on information gathered during two site visits to Vermont, the first in July 1998—about 7 months after the law went into effect—and the second in October 2000. Taken together, these two site visits provide insights into the early implementation experiences and transitions, as well as the longer-term effects of parity on stakeholders. Findings from the two site visits were augmented by information gathered from a review of written public documents and ongoing telephone interviews with key stakeholders over the past several years. Appendix B contains background information on the context leading to Vermont's parity law, including the legislative history.

A. Early Implementation Experiences

To a large extent, the experiences of the State's two largest health insurers—Blue Cross Blue Shield of Vermont (BCBSVT) and Kaiser/Community Health Plan (Kaiser/CHP)—shaped the early implementation of Vermont's parity law. BCBSVT rapidly moved most of its enrollees into managed behavioral health care in response to the parity law and encountered administrative difficulties; in contrast, Kaiser/CHP continued to use its existing managed care model and experienced few changes. The next three sections describe the early implementation experiences of BCBSVT, Kaiser/CHP, and other health plans.

1. *Blue Cross Blue Shield of Vermont*

With the implementation of parity, and as employer contracts subject to parity were renewed over the course of the year, BCBSVT began transferring nearly all of its covered lives in fee-for-service products into a new “carve-out” arrangement with Merit Behavioral Care (MBC). BCBSVT transferred financial risk for all MH/SA services to MBC through a capitation arrangement, while physical health services continued to be covered on an indemnity basis.¹ MBC developed a narrower provider network than that of BCBSVT and used managed care techniques to contain costs. According to BCBSVT representatives, the carve-out arrangement was created specifically to comply with the parity law and to contain the cost of the expanded MH/SA benefit.

By nearly all accounts, this initial transition to a carve-out arrangement did not go smoothly. First, BCBSVT officials indicated that they did not inform their members of changes in benefits and service delivery because they had assumed that employers would communicate this information to their employees. Second, patient-provider relationships initially were disrupted, since many existing BCBSVT providers were not in MBC’s network. These disruptions ultimately were addressed by allowing enrollees six transitional visits to out-of-network providers and by expanding the provider network to ensure adequate geographic coverage. A management change further complicated MBC’s effort to develop its provider network because it was purchased by another

firm, Magellan Health Services, during the transition.² Third, BCBSVT experienced significant computer problems related to revamping its claims adjudication process to reflect the new benefit structure. Finally, the “rolling” implementation of parity within BCBSVT—at the time of contract renewals on or after January 1, 1998—both complicated the communication process and limited the visibility of parity-related changes among BCBSVT enrollees across the State.

In response to the initial transition difficulties, BCBSVT collaborated with other stakeholders—including State regulatory officials, provider groups, and advocacy groups—to address the communication and provider network problems that followed implementation of parity. The Department of Banking, Insurance, Securities, and Health Care Administration (BISHCA), the State agency charged with overseeing the implementation of the parity law, hosted a parity implementation conference involving all interested stakeholders in June 1998. In addition, the Vermont Association for Mental Health hosted a series of public forums in 1998, to which all stakeholders were invited to discuss the goals of the parity law and to identify solutions to problems encountered during the early transition process (BISHCA, 1999).

In response to stakeholder concerns, BCBSVT produced two brochures—one for providers and one for consumers—that explained the changes made as a result of the parity law. These brochures were distributed to all BCBSVT enrollees and MH/SA providers. The plan also took steps to ensure that MBC increased the size of its provider

¹ BCBSVT used MBC for its health maintenance organization (HMO) product (The Vermont Health Plan) prior to passage of the MH/SA parity law. Some employers also requested an option to offer an indemnity product for MH/SA services.

² For the sake of simplicity, this chapter refers to the organization as MBC, despite its subsequent name change to Magellan.

network, allowing a period of several months during which all nonparticipating providers were invited to apply for membership in MBC's network.

The State government also took steps to improve public awareness of the law. For example, State officials developed and disseminated 12,000 flyers that described the reform, wrote opinion pieces and editorials in local newspapers, and sought other news coverage of the parity law. Through a preexisting consumer hotline established to assist consumers with a wide range of health care issues, BISHCA received telephone calls from consumers with concerns related to MH/SA parity and resolved consumer complaints (BISHCA, 1999).

2. Kaiser/CHP

Kaiser/CHP simplified its transition to MH/SA parity by changing its benefits for all contracts in January 1998, regardless of the contract renewal date. Mental health and substance abuse copayments were brought in line with those for physical health benefits, and the 20-visit outpatient and 30-day inpatient limits were dropped from the typical benefit packages the plan offered. Mental health benefits already were managed tightly prior to parity, especially in comparison to the traditional indemnity products offered by BCBSVT. According to health plan officials, Kaiser/CHP enrollees experienced relatively little change in the management of MH/SA services following implementation of the parity law. To manage hospital costs under the parity mandate, Kaiser/CHP implemented hospital diversion and step-down programs and increased the use of partial hospitalization treatment and group therapy.

In 1999, Kaiser/CHP announced that it was pulling out of the Vermont market as

part of the plan's wider withdrawal from the entire Northeast region. (The plan ceased operations in Vermont in March 2000.) A large portion of Kaiser/CHP enrollees chose to enroll in MVP Health Plan, a health maintenance organization (HMO) operating in the Vermont market with a similar managed care approach, while a smaller portion chose BCBSVT or other plans. As a result of this change, MVP captured almost a quarter of the privately insured market in Vermont by 2000, after accounting for less than 3 percent of the market in 1998. The transition of enrollment to MVP and other plans was reported generally to be smooth, although MVP did have to expand its MH/SA provider network substantially to provide care to the large influx of new enrollees.

3. Other Health Plans

Other health plans expanded their in-network benefits to comply with the parity law, but little evidence suggests that they implemented other significant changes to their health insurance products (BISHCA, 1999). In 2000, one health plan participating in the individual market—Fortis—withdrawn from the Vermont market, attributing its decision, in part, to the requirements of the parity law. Interviews with Fortis executives indicated that the plan was poorly positioned to respond to parity because it lacked an existing managed care product and provider network, focused on the individual market, and represented only a small market share. To remain in the Vermont market, Fortis executives believed that they faced a decision either to build a costly managed care provider network for delivering MH/SA services or to experience a large increase in overall MH/SA utilization and

costs. Since neither option was considered viable in a market that represented a small portion of their national business, Fortis chose to pull out of Vermont.

B. Early Effects on Vermont's MH/SA Delivery System

1. Perspectives on the Introduction of Managed Care for MH/SA Services

Perhaps the strongest point of contention among stakeholders in Vermont concerned the implementation of managed care for MH/SA services coincident with the benefit expansion under parity. Health plan and employer representatives viewed the use of managed care as a key condition to maintain the cost-effectiveness of an expanded MH/SA benefit package. These stakeholders perceive that the use of managed care arrangements was the main reason premiums and utilization have not risen dramatically during the first few years following parity implementation. Health plan representatives also believe that the use of managed care arrangements has not diminished access to or quality of care. They maintain that managed care approaches might improve quality by imposing rigorous, uniform standards for delivering services through the development of practice guidelines, determinations of medical necessity, and reviews of provider practice patterns. Some stakeholders noted that providers unrealistically might have expected that benefits for mental health truly would be unlimited, and that they never really foresaw the emergence of managed care for MH/SA services.

Providers who delivered MH/SA services to BCBSVT's fee-for-service enrollees prior to parity were surprised by the immediate imposition of a more restrictive provider

network for their BCBSVT patients. Providers expressed concern about the potential discontinuity in care for BCBSVT enrollees and the adequacy of MBC's provider network to meet enrollees' needs. Some believed that use of a carve-out arrangement disrupted well-established referral patterns, particularly between primary care providers and mental health professionals. Many providers also objected to the terms of MBC's contracts (including utilization review and reduced fees) and to the credentialing process required to join the network. In particular, they were not happy with MBC's use of medical-necessity criteria to make coverage decisions, arguing that it primarily is a cost-containment strategy with little clinical validity. Furthermore, some provider representatives were not pleased that an organization perceived as a "newcomer" in the State (MBC/Magellan) was now dictating payment terms and practice patterns to local providers who wished to participate in the network.

Consumer representatives echoed many of the providers' concerns. They reported that the rapid transition of BCBSVT to managed behavioral health was poorly coordinated and communicated to consumers, resulting in confusion about benefits and coverage. Consumer representatives also expressed concern about the loss of choice of providers and modes of treatment. They reported that consumers experienced discontinuities in provider relationships and that, in some areas, provider networks did not include appropriately skilled providers to meet the complex needs of some consumers.

2. Effects on the Public Sector

Stakeholders in both the private and public sectors agreed that the implementation of

parity had little noticeable effect on the public delivery system or on the extent of public-private sector coordination of care for those with MH/SA conditions. Prior to parity, private health plans usually provided coverage for mental health services to people with severe mental illness for only a limited time period. When patients exceeded pre-parity coverage limits and could not pay for services out-of-pocket, they usually switched to public sector providers. As a result, the public system became the main provider of longer-term treatment for patients with chronic conditions who originally had been covered by private insurance.

Some advocates anticipated that parity would increase the role of the private sector in providing care for patients with chronic conditions (and thus reduce public sector costs). They also expected that private plans would pay for more MH/SA services previously provided only by public sector providers. However, health plans believed that the parity law was not intended to give private health plans added responsibility for the coverage of public sector services. They noted that medical insurance benefits were not intended to cover custodial services or services that support daily functioning, but that do not address underlying illness. In response to this argument, proponents of expanding health plans' responsibilities indicated that the plans often cover services related to chronic medical conditions that maintain functioning and thus should take the same

approach to treating chronic mental illness or chemical dependency.³

C. Stakeholder Reflections on the Effectiveness of Vermont's Parity Law

1. How Well Did Consumers Understand Vermont's Parity Law?

After 3 years of implementation experience, a strong consensus emerged that communication and education efforts should have been stronger, especially during the first year of implementation. Many stakeholders acknowledged that, prior to passage of the parity law, they were not sufficiently aware of the importance of a coherent education and communication effort to minimize confusion and disruptions in service delivery, especially given the changes BCBSVT made in the coverage and treatment of MH/SA services. Many stakeholders noted that responsibility for communication was not assigned clearly at the outset, and thus it was not until several months after parity was implemented that more extensive communication efforts were undertaken.

Many stakeholders also agreed that, despite outreach and education efforts, many consumers continue to be unaware of the law or the expanded MH/SA benefits. Stakeholders, however, disagreed about the relative importance of undertaking broader outreach efforts in the future. Consumer advocates and providers generally believe that access to MH/SA services can only be improved significantly with ongoing

³ One common analogy suggested was how health plans approach the management of diabetes. Providers noted that health plans routinely pay for long-term treatment to maintain functioning in people with diabetes and to prevent acute episodes that may require hospitalization. They contrasted

health plan management of chronic mental illness by pointing out that health plans—through their medical-necessity criteria—typically are willing to authorize only short-term mental health treatment (8 to 10 therapy sessions), unless the patient is in the midst of an acute episode.

education efforts. Health plan representatives, however, express skepticism about the efficacy of broad-based education efforts, noting that consumers ignore most educational material, especially when they do not believe that they will need MH/SA services in the near future.

2. *Did Vermont's Parity Law Achieve Its Objectives?*

Stakeholders identified several objectives of Vermont's parity law, including making MH/SA benefits equal to physical health benefits; reducing financial hardships for consumers and their families; and reducing discrimination and stigma associated with MH/SA services. Stakeholders expected that, by meeting these objectives, access to MH/SA services would improve and utilization would increase.

There were mixed opinions about whether Vermont's parity law achieved these objectives. In the view of most stakeholders, parity achieved the explicit goal of expanding benefits (including the elimination of discriminatory financial and benefit limits for MH/SA services), and, thus, removed substantial financial barriers to care for many consumers. Some also believe that the publicity surrounding the parity law increased awareness of the importance of MH/SA services and removed some of the stigma associated with MH/SA conditions. Yet, many viewed the introduction of managed care for MH/SA services as a significant obstacle to achieving the goal of increased access to care, because of the limited provider networks and utilization review procedures. However, many respondents noted in the Fall 2000 interviews that it was too early to tell whether parity can achieve the goal of increasing access with the man-

aged care arrangements that have been put in place.

State officials, consumer advocates, and provider association representatives consistently noted that the longstanding shortage of certain types of providers, as well as the geographic maldistribution of existing providers, potentially limited achievement of the goals of the parity law. These stakeholders noted, for example, that shortages of child psychiatrists and psychiatric hospital beds in Vermont placed constraints on the parity law's ability to expand access to care for children with serious emotional disturbances. Moreover, some raised concern that general provider shortages in rural areas might constrain access and utilization despite the benefit expansion. Some stakeholders expressed hope that the parity reforms would highlight the need to address existing provider shortages—especially in children's services.

Health plan and employer representatives generally believed that the parity law had little effect on premiums or the costs of care during the first few years, especially when compared to other, more significant, health care cost "drivers" such as rising prescription drug costs. Although employers, health plans, and health insurance agents remained concerned about the cumulative effects of state-mandated health insurance benefits, they did not believe that the parity law itself was a significant contributor to premium increases in the first few years. The introduction of managed care arrangements in MH/SA services was cited as an important reason for the small effects on costs. However, some also said that costs could increase if more consumers became aware of expanded benefits and sought MH/SA services from health plans.

Stakeholders also generally agreed that, despite renewed efforts at education and communication, most privately insured Vermont residents are unaware of the parity reforms and expanded benefits mandated under the law. For these reasons, many respondents had now turned their attention to additional reforms to improve the quality of MH/SA services.

D. Development of New State-Level Initiatives

In the context of the new—and, in some cases, unforeseen—managed care environment, many provider groups and consumer advocates saw the Vermont parity law as only the first step toward improved quality and access to MH/SA services. In response to continuing concerns about the effects of a shift to managed care for MH/SA services, the Vermont legislature passed Act 129 in 2000, which mandated new annual reporting requirements and quality standards for the five largest health plans operating in Vermont (see Appendix B; Table B.1).⁴ The goal of the law was to gather information showing health plans' performance in delivering MH/SA services. These reports also were intended to serve as a “barometer” for

⁴ The law was intended to build on Vermont's existing managed health care consumer protection law (Rule 10), which proponents believed was not adequate to address concerns about managed care arrangements for MH/SA services. Specifically, Act 129 required annual filing of medical loss ratios specifically for MH/SA conditions, as well as annual filing of a report card showing: (1) annual inpatient MH/SA discharge rates; (2) average length of stay for inpatient treatment and number of outpatient visits for MH/SA services; (3) percent of covered lives receiving inpatient and outpatient MH/SA services; (4) number of denials of MH/SA services; (5) number of denials appealed by consumers and/or providers; (6) rates of readmission for inpatient MH/SA services; and (7) patient satisfaction measures.

the quality effects of the parity law. Proponents of the new law wanted to address concerns about the potential for excessively low “medical loss ratios” (health care claims expenses divided by premium revenues) among health plans or their contracted MH/SA carve-out organizations. Some speculated that low ratios could indicate high profits and/or administrative costs, signifying a diversion of resources away from direct service delivery. The law created a task force to oversee implementation of the Act, including representatives from BISHCA and other State agencies, health plans, consumers, providers, and the business community. According to State officials, the task force deliberations provided an opportunity to educate providers and consumers about how health plans operate and the intricacies of measuring health plan performance.

E. Discussion

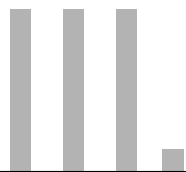
This chapter has described the rollout of parity in Vermont, including early transitions and more recent legislative efforts to extend the reforms to ensure the quality of MH/SA services. The results are based on experiences during the first few years following implementation of parity. As such, the results reflect the initial stages of parity implementation, and a longer study period would be required to learn about the effects of a more mature parity policy.

This implementation case study demonstrated contrasting health plan experiences in response to parity. At one extreme, Kaiser/CHP, an HMO, exhibited relative stability in the management of MH/SA services before and after parity (until its withdrawal from the Vermont market in March 2000). At the other extreme, BCBSVT shifted most of its fee-for-service enrollees to a managed

care carve-out for MH/SA services, concurrent with the implementation of parity, resulting in widespread reports of discontinuities for consumers and providers. The State regulatory agency, consumer advocates, and providers were proactive in working with BCBSVT to address problems resulting from changes in its MH/SA delivery system. The experiences of BCBSVT provide important insights into what can happen when parity and managed care are implemented concurrently, especially in a State with a relatively low managed care presence.

There was broad agreement that parity had not caused substantial increases in premium costs in the first few years, largely due

to the widespread use of managed care for MH/SA services. Most stakeholders also recognized that education and communication efforts about parity were inadequate, resulting in heightened expectations among providers and confusion among consumers. There was less agreement, however, about whether parity had achieved the goals of expanding access to care and providing financial protections to consumers and their families. Many now see the parity law as a first step to improve the status of MH/SA services in Vermont, acknowledging that some effects will be longer-term as consumers gradually become aware of expanded benefits under the parity law.



Health Plan Responses to the Vermont Parity Law

This chapter provides evidence on how two health plans responded to the Vermont parity law. This analysis is based on the experiences of Blue Cross Blue Shield of Vermont (BCBSVT) and Kaiser/Community Health Plan (Kaiser/CHP), which, together, accounted for 78 percent of the private insurance market in Vermont at the time parity was implemented in 1998. The first section describes the effects of parity on the terms and conditions of coverage for mental health and substance abuse (MH/SA) services. The second section presents empirical results of the effects of parity on access, use, and spending for MH/SA services.

A. Effects on MH/SA Coverage Provisions

1. *Pre-Parity Coverage of MH/SA Services*

To understand the potential effects of parity on access, use, and spending, this study first examined the pre-parity MH/SA coverage limits and cost-sharing requirements for BCBSVT and Kaiser/CHP, based on the contracts with the highest enrollment in 1997.¹ The two most prevalent plans offered by Kaiser/CHP in 1997 varied only in the level of cost sharing (\$5 versus \$10 per visit). BCBSVT offered a wide range of contracts that varied not only in coverage provisions, but also in the use of managed care for MH/SA services prior to parity:

- **Basic and Comprehensive (Comp):** Indemnity products with fee for service (FFS) payment of providers and no limitations on the provider network.
- **Vermont Freedom Plan (VFP):** A preferred provider organization (PPO) with a designated provider network. Benefits varied according to whether the plan covered groups or individuals. In addition, the VFP individual plan used a carve-out to manage MH/SA services prior to parity.
- **Vermont Health Partnership (VHP):** A point-of-service (POS) plan that relied on a carve-out to manage MH/SA services.
- **The Vermont Health Plan (TVHP):** A health maintenance organization (HMO) with MH/SA services managed by the TVHP network.

¹ The empirical analysis presented in Section B includes all contracts, regardless of the level of enrollment or benefit design.

BCBSVT also had an extensive system of riders that covered MH/SA benefits above and beyond the standard plan offerings for an additional premium. However, most people enrolled in the top plans of 1997 did not have a rider for MH/SA services.

a. Variation in Covered Services

As shown in Table III.1, the types of MH/SA services covered by Kaiser/CHP and BCBSVT prior to parity were similar in many, but not all, respects. Kaiser/CHP covered inpatient psychiatric care in specialty and general hospitals, as well as outpatient therapy (including psychotherapy and medication management). It also covered inpatient and outpatient detoxification and outpatient substance-abuse counseling. Coverage for nonhospital residential care and intensive nonresidential care was approved on a case-by-case basis.

BCBSVT covered a continuum of mental health services across all its plans: inpatient psychiatric care, nonhospital residential services, partial/day treatment,² and outpatient therapy. Substance abuse coverage consisted of inpatient and outpatient detoxification, nonhospital residential services, intensive nonresidential services, and outpatient counseling. The FFS plans, however, covered treatment only for alcoholism; the PPO, POS, and HMO plans covered treatment for alcohol and other drugs.

b. Variation in MH/SA Benefit Limits

Prior to implementation of the Vermont parity law and the Federal Mental Health Parity

Act,³ indemnity plans typically set annual or lifetime benefit limits, while HMOs typically applied limits on the number of covered inpatient days or outpatient visits (Buck et al., 1999). The health plans in Vermont generally followed this national pattern (see Table III.1).

Kaiser/CHP provided coverage for up to 30 days of inpatient treatment in psychiatric hospitals and up to 20 outpatient mental health visits per year. Similarly, the three BCBSVT plans that covered MH/SA services through managed care arrangements—VFP-individual,⁴ VHP, and TVHP—set annual limits on inpatient days (30 to 45 days per year) and outpatient visits (20 to 30 visits per year). The BCBSVT indemnity plans (Basic, Comprehensive, and VFP-group products) typically had annual limits of \$5,000 and lifetime limits of \$10,000 for mental health services (inpatient and outpatient combined). The Basic plan capped allowable outpatient visits at 50 visits per year in addition to the dollar ceilings.

Coverage of substance abuse services was subject to limits on inpatient days and outpatient hours (in compliance with the minimum benefit mandated by existing state law). Kaiser/CHP had a limit of 28 inpatient days per year and 56 inpatient days per lifetime. All BCBSVT plans similarly had a limit of 28 inpatient days per occurrence and 56 days per lifetime. The limit on outpatient hours of

² Partial/day treatment is a form of intensive outpatient treatment for MH/SA disorders that require moderate to high-intensity services. Treatment includes a minimum of 5 hours per day within a structured therapeutic milieu (Merit Behavioral Care Corporation, 1997).

³ The Mental Health Parity Act took effect on January 1, 1998 (concurrent with Vermont's parity law), and prohibited insurers from applying annual and lifetime dollar limits to mental health benefits that differed from those applied to general health benefits. Refer to Chapter I for a comparison of the terms of the Vermont and Federal parity laws.

⁴ Prior to parity, the VFP individual plan provided MH/SA services through a managed care carve-out, whereas the VFP group plan covered MH/SA services on an indemnity basis.

substance abuse services was the same for Kaiser/CHP and BCBSVT plans: 90 hours per year and 180 hours per lifetime. Kaiser/CHP officials indicated, however, that they had no system to manage SA benefits according to the number of hours and, instead, tracked the number of visits.

Exclusions or adjustments to the MH/SA benefit limits were common, and affected what health plans counted toward the benefit limit prior to parity. For example:

- Major Medical products offered by BCBSVT adjudicated inpatient stays at nonpsychiatric hospitals as medical claims and, therefore, did not apply such stays to the mental health dollar maximums.
- Kaiser/CHP and BCBSVT considered 2 partial days to be a “day equivalent” for inpatient care.
- In determining annual visit counts, Kaiser/CHP did not count medical management visits toward the outpatient MH visit limit and counted group therapy visits as one-half of an outpatient visit.
- Kaiser/CHP did not count MH/SA visits provided in inpatient settings toward the visit limit, but BCBSVT counted inpatient MH/SA visits toward the annual/lifetime dollar limits.
- Neither Kaiser/CHP nor BCBSVT counted visits to primary care providers toward the outpatient visit limit.

These adjustments and exclusions resulted in variations within and across health plans in the “effective” limits that members faced prior to parity.

c. Variation in Cost-Sharing Requirements

In addition to setting dollar and service limits, the two plans used differential copay-

ment and coinsurance amounts to control MH/SA utilization. Typically, the separate cost-sharing requirements applied to outpatient services; however, the BCBSVT HMO product (TVHP) had an inpatient copayment of \$500 per mental health admission, while the VFP-group product had a 50 percent coinsurance on both inpatient and outpatient mental health services.

More common among the managed care plans—such as Kaiser/CHP, VFP-individual, VHP, and TVHP—was the practice of a two-tiered copayment for outpatient visits. The copayment for the first five visits ranged from \$0 to \$10, while the remaining visits (up to the limit) were \$25. The less managed plans of BCBSVT generally did not have a different cost-sharing structure for MH/SA services, relying instead on the same deductible and office coinsurance rate used for physical health services (usually 80 percent). The one exception was the VFP-group product, which had a 50 percent coinsurance rate for MH/SA services, compared to an 80 percent coinsurance rate for other services.

2. *Changes Brought About by the Vermont Parity Law*

With the introduction of parity in 1998, Kaiser/CHP and BCBSVT eliminated differential benefit limits and cost-sharing requirements for MH/SA services. For Kaiser/CHP, the change was relatively straightforward, resulting in elimination of the 30-day limit on inpatient days, the 20-visit limit on outpatient services, and the two-tiered copayment structure for outpatient visits. All Kaiser/CHP contracts were brought into compliance with the parity provisions on January 1, 1998, regardless of the date of contract renewal. Kaiser executives indicated that, because few members reached the limit

Table III.1: Overview of Mental Health/Substance Abuse Benefits Offered by Two Vermont Health Plans: 1997 Pre-Parity Baseline (Most Prevalent Plans by Line of Business)

	Kaiser/CHP	Blue Cross Blue Shield of Vermont (BCBSVT)					
	Compre/Share (N = 45,857) HMO	Basic (N = 26,702) FFS	Comprehensive (N = 2,946) FFS	Vermont Freedom Plan		Vermont Health Partnership (N = 10,945) POS	The Vermont Health Plan (N = 4,915) HMO
				Group (N = 9,609) PPO	Individual (N = 3,670) PPO		
COVERED SERVICES							
Mental Health (MH) Inpatient psychiatric care Nonhospital residential Partial hospitalization Outpatient therapy	Yes No No Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes (2) Yes (2) Yes (2) Yes (2)	Yes (2) Yes (2) Yes (2) Yes (2)
Substance Abuse (SA) Inpatient detoxification Outpatient detoxification Nonhospital residential Partial hospitalization Outpatient counseling Methadone maintenance	Yes Yes No No Yes No	Yes (1) Yes (1) Yes (1) Yes (1) Yes (1) No	Yes (1) Yes (1) Yes (1) Yes (1) Yes (1) No	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No	Yes (2) Yes (2) Yes Yes Yes (2) No	Yes (2) Yes (2) Yes Yes Yes (2) No
MENTAL HEALTH LIMITS							
Amount payable per year Amount payable per lifetime	n.a. n.a.	\$5,000 (3,4) \$10,000 (3)	\$5,000 (3) \$10,000 (3)	\$5,000 (3) \$10,000 (3)	n.a. n.a.	n.a. n.a.	n.a. n.a.
Inpatient Limits Inpatient MH days per year Inpatient MH days per lifetime Higher inpatient MH coinsurance Separate inpatient MH deductible	30 days No limit No No	No limit No limit No No	No limit No limit No No	No limit No limit 50% No	30 days No limit No No	30 days No limit No No	45 days No limit \$500 copay No
Outpatient Limits MH visits per year Different MH coinsurance	20 visits None: visits 1–5 \$25: visits 5–20	50 No	No limit No	No limit 50%	20 \$10: visits 1–5 \$25: visits 6–20	20 \$10: visits 1–5 \$25: visits 6–20	30 None: visits 1–5 \$25: visits 6–30
Office coinsurance	\$10 (Compre) \$5 (Share)	80% (5)	80% (5)	80% (5)	\$15	\$5	\$5

Table III.1 continued

Table III.1 continued							
	Kaiser/CHP	Blue Cross Blue Shield of Vermont (BCBSVT)					
	Compre/Share (N = 45,857) HMO	Basic (N = 26,702) FFS	Comprehensive (N = 2,946) FFS	Vermont Freedom Plan		Vermont Health Partnership (N = 10,945) POS	The Vermont Health Plan (N = 4,915)) HMO
				Group (N = 9,609) PPO	Individual (N = 3,670) PPO		
SUBSTANCE ABUSE LIMITS							
Amount payable per year	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Amount payable per lifetime	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Inpatient Limits							
Inpatient SA days per year	28	28 days per occurrence	28 days per occurrence	28 days per occurrence	28 days per occurrence	28 days per occurrence	28 days per occurrence
Inpatient SA days per lifetime	56	56	56	56	56	56	56
Higher inpatient SA coinsurance	No	No	No	50%	No	No	No
Separate inpatient SA deductible	No	No	No	No	No	No	No
Outpatient Limits							
Outpatient SA hours per year	90	90	90	90	90	90	90
Outpatient SA hours per lifetime	180	180	180	180	180	180	180
Different SA coinsurance	None: visits 1–4 \$25: visits 5–20	No	No	50%	\$10: visits 1–5 \$25: visits 6–20	\$10: visits 1–5 \$25: visits 6–20	None: visits 1–4 \$25: visits 5–30
Office coinsurance	\$10 (Compre) \$5 (Share)	80% (5)	80% (5)	80% (5)	\$15	\$5	\$5

Source: Kaiser/CHP and Blue Cross Blue Shield of Vermont contract files and additional information provided by the plans.

Note: The benefits shown on this table are for the most prevalent plans by line of business in 1997. The number of enrollees (shown in parentheses) reflects the number ever enrolled in 1997.

(1) BCBSVT Basic and Comp policies cover detoxification and rehabilitation services for alcoholism but not for other substances.

(2) A referral is not required from a primary care provider (PCP); however, all MH/SA services require prior approval from the plan.

(3) The maximums apply to combined inpatient and outpatient mental health benefits.

(4) For Basic/Major Medical products, inpatient stays at nonpsychiatric hospitals are treated as medical claims and do not apply to the MH maximums.

(5) Coinsurance applies after a deductible is met.

FFS = fee for service; HMO = health maintenance organization; Kaiser/CHP = Kaiser/Community Health Plan; n.a. = not applicable; PPO = preferred provider option.

pre-parity, they did not make major changes in their approach to care management. Their philosophy—both pre- and post-parity—was that resources were limited and the health plan encouraged treatment planning to spread the benefit over a longer period of time (for example, through the use of intensive outpatient treatment as a substitute for inpatient treatment and group therapy rather than individual sessions). Following implementation of parity, Kaiser/CHP officials reported that they attempted to target inpatient services more efficiently, increasing the use of step-down and diversion programs to shorten the length of inpatient stays or to avoid hospitalization altogether.

BCBSVT phased in the parity provisions upon contract renewal, beginning with contracts renewed on January 1, 1998. With the introduction of parity, BCBSVT streamlined the number of benefit packages and rider options for MH/SA services. The three basic types of post-parity benefit packages for MH/SA services included:

1. An unmanaged parity benefit, in which MH/SA services continued to be paid on an indemnity basis;
2. A managed parity benefit with in-network benefits only, in which the MH/SA benefit was managed through a behavioral health carve-out; and
3. A managed parity benefit with in-network and out-of-network benefits, in which the MH/SA benefit was managed through a carve-out, and the out-of-network benefits were subject to separate limits and cost-sharing requirements.⁵

⁵ The Vermont parity law does not require out-of-network benefits to conform to the parity law. Comp and VFP contracts with an out-of-network MH/SA benefit covered the following services when provided by out-of-network providers:

Most members enrolled in the BCBSVT indemnity products—Basic, Comprehensive, and VFP-group products—were shifted to a managed care carve-out for their MH/SA benefits, although their other benefits continued to be provided on an indemnity basis. As discussed in Chapter II, this initially caused disruption and confusion among providers and consumers because of a combination of such factors as limited communication about the change, tight provider networks, and aggressive management of the newly expanded benefit.

B. Effects of Parity on Access, Use, and Spending

1. Analytic Approach

The adoption of parity in Vermont provided a “natural experiment” in which to learn about the effects of benefit changes on MH/SA access, use, and spending under contrasting health plan experiences. Kaiser/CHP provides a measure of effects within an integrated managed care model before and after parity, whereas BCBSVT demonstrates effects in a plan that shifted a large share of members from indemnity coverage to managed care but retained some members in unmanaged care.

The underlying framework for this analysis was a decomposition of per capita spending into its component parts: the proportion of enrollees receiving services (a measure of access to care), the number of services per

inpatient mental health—25 days annually and 50 days lifetime at 50 percent coinsurance; outpatient mental health—up to 20 visits annually, subject to a \$5,000 lifetime maximum benefit; inpatient substance abuse—30 days per occurrence and 60 days lifetime at 50 percent coinsurance; and outpatient substance abuse—90 hours per year and 180 hours lifetime at 50 percent coinsurance.

user (a measure of intensity of care), and the spending per unit of service. This decomposition can be represented as follows:

$$$/E = U/E * S/U * $/S,$$

where:

$$/E$ = MH/SA spending per member per quarter

U/E = number of users per 1,000 enrollees per quarter (measure of access)

S/U = number of services per 1,000 users per quarter (measure of intensity of care)

$$/S$ = spending per unit of service (measure of payment rate)

This approach was used to quantify the extent to which parity affected access to care, intensity of care, and spending for MH/SA treatment. Refer to Appendix C for an overview of the data and methods used in this analysis.

2. *Patterns of Access to and Use of Mental Health Services Before and After Parity*

a. Outpatient Treatment

Access to outpatient MH services—measured by the number of MH users per 1,000 members per quarter—increased significantly for both Kaiser/CHP and BCBSVT enrollees post-parity. Kaiser/CHP experienced a 6.4 percent increase in the number of outpatient MH users per 1,000 members per quarter, while BCBSVT experienced a 7.9 percent increase (Table III.2). The likelihood of obtaining MH services increased by 18 to 24 percent as a result of parity.⁶

⁶This result was derived from the multivariate analysis and is based on the odds ratio signifying the independent effect of parity on the probability of obtaining outpatient MH services. See Appendix C for the complete multivariate results (Appendix Tables C.1 and C.2).

The intensity of outpatient MH treatment—that is, the number of MH services per user per quarter—varied between the two health plans. Among Kaiser/CHP members, the average number of visits per user per quarter increased slightly (from 3.26 to 3.48 visits). The combined effect of increased access to and intensity of outpatient MH treatment led to a 14 percent increase in the number of outpatient MH visits per 1,000 members per quarter. Relatively few Kaiser/CHP members received group therapy as part of their MH treatment before parity, and the percentage did not change significantly after parity. However, the average number of group therapy visits per user did increase, suggesting that Kaiser/CHP relied on group therapy to extend the number of visits per user post-parity but did not widen the use of group therapy to a larger share of the population in treatment.

Among BCBSVT members, there was a 6 percent reduction in the average number of outpatient services per user. Despite increases in initial access to outpatient services, there was no change in the overall number of services per 1,000 members, due to the reduction in intensity of treatment. The aggregate reduction in intensity of care was a function of the shift to managed care. As shown in Figure III.1, those shifting into managed care experienced a reduction in the average number of visits per user per quarter (all else being equal), while those remaining in an unmanaged product experienced a slight increase in the predicted number of visits per user. As a result, there was an estimated one-half visit differential during the quarter parity went into effect (3.4 visits managed versus 3.9 visits unmanaged). Thus, parity shifted the average level of use

Table III.2: Access to and Use of Mental Health Services by Members of Two Vermont Health Plans: 1996–1999

<i>Mental Health (MH) Services</i>	<i>Before Parity</i>	<i>After Parity</i>	<i>Percent Change</i>
Kaiser/Community Health Plan (Kaiser/CHP)			
Number of MH users per 1,000 members per quarter			
Any MH services	19.28	20.53	6.5 **
Inpatient/residential MH services	0.34	0.21	–38.2 **
Partial MH services	0.08	0.14	75.0
Outpatient MH services	19.24	20.48	6.4 **
Number of MH services per user per quarter			
Inpatient/residential MH days	10.72	11.23	4.7
Partial MH days	8.27	5.96	–27.9
Outpatient MH visits	3.26	3.48	6.5 **
Number of MH services per 1,000 members per quarter			
Inpatient/residential MH days	3.98	2.51	–36.9
Partial MH days	0.80	1.16	45.0
Outpatient MH visits	62.62	71.62	14.4 **
Percentage of outpatient MH users receiving group therapy	5.0%	4.1%	–18.9
Average number of group therapy visits per user	3.49	4.81	38.1 ***
Blue Cross Blue Shield of Vermont			
Number of MH users per 1,000 members per quarter			
Any MH services	31.13	33.57	7.8 ***
Inpatient/residential MH services	0.23	0.40	73.9 **
Partial MH services	#	0.07	— ***
Outpatient MH services	31.09	33.54	7.9 ***
Number of MH services per user per quarter			
Inpatient/residential MH days	8.97	7.70	–14.2
Partial MH days	#	7.65	— *
Outpatient MH visits	5.06	4.73	–6.4 ***
Number of MH services per 1,000 members per quarter			
Inpatient/residential MH days	1.99	3.18	59.8 *
Partial MH days	#	0.75	— *
Outpatient MH visits	156.79	159.43	1.7
Percentage of outpatient MH users receiving group therapy	3.4%	3.5%	5.1
Average number of group therapy visits per user	5.70	5.89	3.3

Source: Original analysis of Kaiser/CHP and Blue Cross Blue Shield of Vermont claims/encounter data by Mathematica Policy Research, Inc.

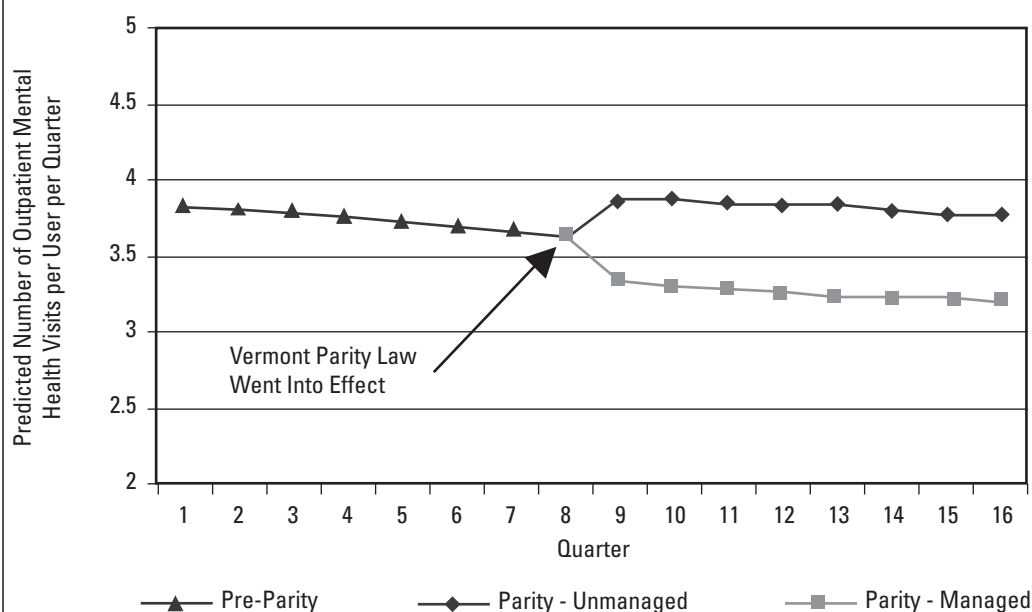
Less than 0.05

* Significantly different from zero at the .10 level, two-tailed test.

** Significantly different from zero at the .05 level, two-tailed test.

***Significantly different from zero at the .01 level, two-tailed test.

Figure III.1: Simulation of the Effects of Parity and Managed Care on the Average Number of Outpatient Mental Health Visits per User: Blue Cross Blue Shield of Vermont, 1996–1999



upward, while managed care exerted a downward pressure.

These aggregate patterns of use were confirmed by examining distributions of the annual level of use. Among Kaiser/CHP members receiving any outpatient MH treatment, a higher proportion of users exceeded the pre-parity 20-visit limit in 1998 and 1999 (Table III.3). In contrast, BCBSVT members showed no increase in the proportion of outpatient MH users with more than 20 visits. Instead, a growing concentration of users was noted at the low end of the distribution (10 visits or less).

A similar analysis was conducted on the subgroup of health plan members with a primary diagnosis of major depression, bipolar disorder, or schizophrenia to determine whether those with a serious mental condition may have been affected differently (data not shown). The results paralleled

those in the general population of outpatient MH users. Among Kaiser/CHP members, the intensity of outpatient treatment increased, with a higher proportion exceeding the 20-visit pre-parity limit (11.9 percent in 1996 versus 16.4 percent in 1999). Among BCBSVT members, no significant change was observed in the level of outpatient use; for example, about one-fourth received 20 or more outpatient visits both before and after parity.

b. Inpatient/Partial Treatment

The two health plans exhibited opposite patterns of inpatient/partial treatment following implementation of parity. Fewer Kaiser/CHP members received inpatient MH treatment post-parity, as evidenced by a 38 percent reduction in the number of users per 1,000 members (Table III.2). The number of days per 1,000 members did not decline, however,

Table III.3: Annual Level of Mental Health Utilization by Members of Two Vermont Health Plans: 1996–1999

	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>
Number of Outpatient MH Visits	Percentage of Users			
Kaiser/CHP				
1–5	60.70	60.80	55.54	56.08
6–10	20.31	22.22	21.32	20.83
11–20	14.97	13.33	16.33	15.32
More than 20	4.02	3.65	6.81	7.78
Blue Cross Blue Shield of Vermont				
1–5	41.15	42.09	42.47	43.00
6–10	19.25	20.44	22.36	21.58
11–20	19.80	18.80	19.57	19.07
More than 20	19.80	18.67	15.60	16.36
Number of Inpatient/Partial MH Days^a	Percentage of Users			
Kaiser/CHP				
1–2	7.79	19.09	22.09	9.09
3–7	29.87	32.73	36.05	42.42
8–14	33.77	27.27	30.23	24.24
15–21	12.99	7.27	3.49	6.06
22–30	11.69	12.73	2.33	3.03
More than 30	3.90	0.91	5.81	15.15
Blue Cross Blue Shield of Vermont				
1–2	12.12	13.64	13.56	13.56
3–7	31.82	47.73	33.90	37.29
8–14	31.82	25.00	28.81	33.90
15–21	15.15	4.55	11.86	6.78
22–30	1.52	6.82	8.47	5.08
More than 30	7.58	2.27	3.39	3.39

Source: Original analysis of Kaiser/CHP and Blue Cross Blue Shield of Vermont claims/encounter data by Mathematica Policy Research, Inc.

^a One day of partial treatment is counted as one-half day of inpatient treatment.

Kaiser/CHP = Kaiser/Community Health Plan; MH = mental health.

as lengths of stay increased slightly (though not significantly). The distribution of annual levels of use shed further light on the complex patterns observed in the aggregate analysis (Table III.3). Kaiser/CHP experienced an increase in the proportion of inpatient users, with more than 30 inpatient/partial days following implementation of parity, as well as a growing concentration of inpatient users with 3 to 7 days per year.

For BCBSVT enrollees, access to inpatient and partial MH treatment increased significantly following implementation of parity,

despite the shift of the majority of BCBSVT members into managed care (Table III.2). The rate of inpatient users per 1,000 members per quarter rose steeply, leading to a 60 percent increase in the number of inpatient days per 1,000 members per quarter. This aggregate increase in inpatient days was due to increased access, rather than to increased intensity. No significant changes were found in the average number of days per user (Table III.2) or in the annual level of inpatient MH use for BCBSVT members (Table III.3).

3. Patterns of Access to and Use of Substance Abuse Treatment Before and After Parity

a. Outpatient Treatment

Access to outpatient SA treatment by Kaiser/CHP and BCBSVT members declined following implementation of parity (Table III.4). Among those in treatment, however, there was no significant change in the average number of outpatient SA visits per user per quarter. Nevertheless, BCBSVT experienced a 38 percent reduction in the total number of outpatient SA services per 1,000 members per quarter post-parity, given the substantial decline in the level of access. BCBSVT also relied increasingly on group therapy following parity.

b. Inpatient/Partial Treatment

Both health plans experienced large reductions in access to inpatient treatment following parity, coupled with increased access to partial treatment (although the latter change did not achieve statistical significance due to small sample sizes). The likelihood of obtaining inpatient/partial SA treatment dropped 51 percent for Kaiser/CHP members and 34 percent for BCBSVT members.⁷ The pattern of inpatient use differed across the two health plans. Kaiser/CHP members had shorter lengths of inpatient stays post-parity; BCBSVT members had longer stays and higher levels of partial treatment.⁸

The frequency distributions of annual levels of use confirmed these aggregate findings

(Table III.5). Kaiser/CHP members demonstrated a noticeable shift in the distribution of inpatient/partial SA days over the 4-year period toward shorter stays, especially in the range of 3 to 7 days. Among BCBSVT members, treatment intensity increased, as 10 percent received more than 28 days of inpatient/partial SA treatment in 1999, compared to 2 percent pre-parity. These data suggest that BCBSVT (or its managed care carve-out) first raised the “threshold” for entering treatment and then provided more intensive treatment to fewer patients.

4. Patterns of Mental Health and Substance Abuse Spending Before and After Parity

The analyses of access and use present a complex picture of increased use of certain types of services and a decreased use of others. How did these changes in utilization patterns affect spending for MH/SA services? Spending is comprised of both health plan payments and out-of-pocket expenditures. The analysis shows how both of these spending components, as well as overall MH/SA spending, changed following implementation of parity.

This section first presents data on patterns of BCBSVT spending for MH/SA services before and after parity and then imputes the effects of parity on Kaiser/CHP spending. The section concludes with a discussion of the effect of parity on cost sharing for those with serious mental conditions.

a. Mental Health Spending Patterns

On average, MH spending per BCBSVT member per quarter was not significantly different before and after parity (Table III.6). Moreover, MH spending as a percentage of total spending did not change following

⁷ This result was derived from the multivariate analysis (see Appendix Tables C.5 and C.6).

⁸ The multivariate results for Kaiser/CHP suggested that this decline was due to a secular time trend independent of the implementation of the parity law (see Appendix Table C.8).

Table III.4: Access to and Use of Substance Abuse Services by Members of Two Vermont Health Plans: 1996–1999

<i>Substance Abuse (SA) Services</i>	<i>Before Parity</i>	<i>After Parity</i>	<i>Percent Change</i>
Kaiser/Community Health Plan (Kaiser/CHP)			
Number of SA services users per 1,000 members per quarter			
Any SA services	5.69	4.77	–16.2 ***
Inpatient/residential SA services	0.56	0.18	–67.9 ***
Partial SA services	0.18	0.24	33.3
Outpatient SA services	5.43	4.68	–13.8 ***
Number of SA services per user per quarter			
Inpatient/residential SA days	11.19	8.30	–25.8 ***
Partial/intensive outpatient SA days	9.26	8.25	–10.9
Outpatient SA visits	4.29	4.44	3.5
Number of SA services per 1,000 members per quarter			
Inpatient/residential SA days	5.70	1.19	–79.1 ***
Partial/intensive outpatient SA days	1.52	1.79	17.8
Outpatient SA visits	23.97	21.08	–12.1
Percentage of outpatient SA users receiving group therapy	35.1%	32.3%	–8.0
Average number of group therapy visits per user	6.48	6.26	–3.5
Blue Cross Blue Shield of Vermont			
Number of SA services users per 1,000 members per quarter			
Any SA services	4.98	3.53	–29.1 ***
Inpatient/residential SA services	0.39	0.18	–53.8 ***
Partial SA services	0.25	0.33	32.0
Outpatient SA services	4.85	3.38	–30.3 ***
Number of SA services per user per quarter			
Inpatient/residential SA days	10.45	16.68	59.6 ***
Partial SA days	10.07	19.33	92.0 ***
Outpatient SA visits	4.68	4.59	–1.9
Number of SA services per 1,000 members per quarter			
Inpatient/residential SA days	4.21	1.91	–54.6 ***
Partial SA days	2.47	5.18	109.7 **
Outpatient SA visits	23.08	14.24	–38.3 ***
Percentage of outpatient SA users receiving group therapy	18.9%	19.7%	4.3
Average number of group therapy visits per user	5.08	6.44	26.9 *

Source: Original analysis of Kaiser/CHP and Blue Cross Blue Shield of Vermont claims/encounter data by Mathematica Policy Research, Inc.

* Significantly different from zero at the .10 level, two-tailed test.

** Significantly different from zero at the .05 level, two-tailed test.

*** Significantly different from zero at the .01 level, two-tailed test.

implementation of parity, averaging 2.31 percent during both periods. However, spending by type of service did change significantly over the study period. Despite an increase in outpatient utilization, spending on outpatient MH services per member per

quarter declined 6.5 percent, and spending on outpatient MH services per user declined 13 percent—driven by a 10 percent reduction in average spending per outpatient visit. The unit cost reduction could be a function of a changing service mix, as well as of pay-

Table III.5: Annual Level of Substance Abuse Utilization by Members of Two Vermont Health Plans: 1996–1999				
	1996	1997	1998	1999
Number of Inpatient/Partial SA Days ^a	Percentage of Users			
Kaiser/CHP				
1–2	10.67	16.90	28.21	5.26
3–7	26.67	26.76	35.90	52.63
8–14	30.67	36.62	23.08	26.32
15–21	24.00	11.27	7.69	15.79
22–28	6.67	4.23	2.56	0.00
More than 28	1.33	4.23	2.56	0.00
Blue Cross Blue Shield of Vermont				
1–2	8.16	16.00	5.66	7.32
3–7	28.57	36.00	26.42	21.95
8–14	32.65	30.00	41.51	39.02
15–21	20.41	6.00	16.98	19.51
22–28	8.16	10.00	3.77	2.44
More than 28	2.04	2.00	5.66	9.76
Number of Outpatient SA Visits	Percentage of Users			
Kaiser/CHP				
1–5	63.73	59.01	58.15	62.94
6–10	18.03	18.02	17.29	15.88
11–20	11.27	11.71	16.04	13.53
More than 20	6.96	11.26	8.52	7.65
Blue Cross Blue Shield of Vermont				
1–5	46.25	47.15	51.18	51.60
6–10	24.32	22.81	22.05	19.68
11–20	16.82	14.07	16.14	18.09
More than 20	12.61	15.97	10.63	10.63

Source: Original analysis of Kaiser/CHP and Blue Cross Blue Shield of Vermont claims/encounter data by Mathematica Policy Research, Inc.

a One day of partial treatment is counted as one-half day of inpatient treatment.

Kaiser/CHP = Kaiser/Community Health Plan; SA = substance abuse.

ment reductions negotiated by the carve-out plan. In contrast to declining outpatient costs, combined spending on inpatient and partial MH services doubled.

Relatively few BCBSVT members incurred health plan payments of \$5,000 or more pre-parity for MH services; and that pattern continued following implementation of parity (Table III.7). Over the 4-year period, the proportion of MH users with health plan payments over \$1,000 fell from 26 percent to 20 percent. A more pronounced trend was a

growing share of MH users spending between \$101 and \$1,000. This may include two groups of users: (1) those with chronic conditions who received shorter-term psychotherapy and crisis intervention post-parity; and (2) new users with less severe conditions who received a brief course of therapy. Both scenarios are consistent with the results of the descriptive analysis, suggesting that more BCBSVT members had access to MH treatment post-parity, but users received fewer services, on average.

**Table III.6: Spending for Mental Health and Substance Abuse Services:
Blue Cross Blue Shield of Vermont, 1996–1999**

	<i>Before Parity</i>	<i>After Parity</i>	<i>Percent Change</i>
Mental Health (MH)			
Average MH spending per member per quarter			
Any MH services	\$13.98	\$14.25	1.9
Inpatient/residential MH services	\$1.04	\$2.00	92.3 **
Partial MH services	#	\$0.15	— **
Outpatient MH services	\$12.94	\$12.10	–6.5 **
Average MH spending per user per quarter			
Any MH services	\$445.68	\$420.81	–5.6
Inpatient/residential MH services	\$33.74	\$59.16	75.3 *
Partial MH services	#	\$4.61	— **
Outpatient MH services	\$411.94	\$357.04	–13.3 ***
Average unit cost per MH service			
Average spending per stay	\$4,246.54	\$4,134.16	–2.6
Average spending per day	\$627.31	\$643.95	2.7
Average spending per visit	\$82.73	\$74.16	–10.4 ***
MH spending as a percentage of total spending	2.31	2.31	0.0
Substance Abuse (SA)			
Average SA spending per member per quarter			
Any SA services	\$3.80	\$2.03	–46.6 ***
Inpatient/residential SA services	\$1.89	\$0.60	–68.3 ***
Partial SA services	\$0.30	\$0.78	160.0
Outpatient SA services	\$1.61	\$0.96	–40.4 ***
Average SA spending per user per quarter			
Any SA services	\$827.25	\$600.45	–27.4 *
Inpatient/residential SA services	\$430.96	\$155.40	–63.9 ***
Partial SA services	\$73.15	\$156.88	114.5 *
Outpatient SA services	\$323.14	\$288.16	–10.8
Average unit cost per SA service			
Average spending per stay	\$4,229.63	\$3,039.90	–28.1 ***
Average spending per day	\$468.36	\$335.89	–28.3 **
Average spending per visit	\$74.66	\$72.88	–2.4
SA spending as a percentage of total spending	0.37	0.24	–33.7 ***

Source: Original analysis of Blue Cross Blue Shield of Vermont claims/encounter data by Mathematica Policy Research, Inc.

Less than 0.005 dollars.

— Could not be calculated due to small baseline number.

* Significantly different from zero at the .10 level, two-tailed test.

** Significantly different from zero at the .05 level, two-tailed test.

*** Significantly different from zero at the .01 level, two-tailed test.

Table III.7: Annual Level of Health Plan Payments for Mental Health and Substance Abuse Services: Blue Cross Blue Shield of Vermont, 1996–1999

<i>Health Plan Payments</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>
Mental Health	Percentage of Users			
\$1–100	18.02	18.25	15.49	15.22
\$101–250	19.09	20.78	21.66	22.00
\$251–500	18.02	18.14	23.19	23.10
\$501–1,000	19.03	17.61	18.74	19.54
\$1,001–2,500	18.89	18.35	15.42	14.94
\$2,501–5,000	5.73	5.87	3.62	3.18
More than \$5,000	1.21	0.99	1.88	2.02
Substance Abuse	Percentage of Users			
\$1–100	13.87	15.29	19.16	16.12
\$101–250	23.55	20.39	21.07	22.05
\$251–500	18.38	21.17	20.31	16.67
\$501–1,000	18.06	14.12	13.41	17.20
\$1,001–2,500	14.20	17.25	15.71	16.67
\$2,501–5,000	7.75	6.67	6.52	9.14
More than \$5,000	4.20	5.11	3.83	2.15

Source: Original analysis of Blue Cross Blue Shield of Vermont claims/encounter data by Mathematica Policy Research, Inc.

b. Substance Abuse Spending Patterns

The pronounced reductions in SA utilization translated into substantial reductions in spending. Overall, average SA spending per BCBSVT member per quarter fell by 47 percent, with across-the-board reductions in spending for both inpatient and outpatient services (Table III.6). This resulted in a reduction in SA spending as a percentage of total spending from 0.37 to 0.24 percent. Per capita spending reductions were a function not only of lower rates of access but also of lower unit costs for treatment. Among the factors that might account for lower unit costs are differences in service mix, case mix, or lower reimbursements negotiated by the health plan. A more detailed analysis of the annual level of spending revealed little change in the distribution of health plan spending per user (Table III.7).

c. Changes in Health Plan Payments

In the aggregate, quarterly MH/SA spending declined by about 8 percent, while health plan payments for MH/SA services increased by 4 percent (Table III.8). Reductions in consumer out-of-pocket payments drove these increases in health plan payments. Prior to parity, health plan payments accounted for 70 percent of MH spending, while consumers paid for the remaining 30 percent. Following parity, the health plan share rose to 83 percent as consumer cost-sharing requirements were brought into compliance with the parity provisions. The health plan share of SA spending remained constant at 87 percent.

Health plan payments for MH/SA services accounted for 2.47 percent of total health plan payments for all services post-parity, up from 2.30 percent pre-parity (Table III.8). This 0.17-percentage-point increase reflected a 0.26-point increase for MH services and a

Table III.8: Mental Health and Substance Abuse Spending as a Percentage of Total Spending: Blue Cross Blue Shield of Vermont, 1996–1999

	<i>Before Parity</i>	<i>After Parity</i>	<i>Percent Change</i>
Total mental health/substance abuse (MH/SA) spending per member per quarter ^a			
Mental health	\$13.98	\$14.25	1.9
Substance abuse	3.80	2.03	–46.6
MH/SA combined	17.78	16.28	–8.4
Health plan payments per member per quarter			
Mental Health	\$9.74	\$11.87	21.9
Substance abuse	3.30	1.75	–47.0
MH/SA combined	13.04	13.62	4.4
Health plan payments as a percentage of total MH/SA spending			
Mental health	69.7%	83.3%	n.a.
Substance abuse	86.8%	86.2%	n.a.
MH/SA combined	73.3%	83.7%	n.a.
Health plan payments for MH/SA services as a percent of total health plan payments			
Mental health	1.98%	2.24%	n.a.
Substance abuse	0.32%	0.23%	n.a.
MH/SA combined	2.30%	2.47%	n.a.

Source: Original analysis of Blue Cross Blue Shield of Vermont claims/encounter data by Mathematica Policy Research, Inc.

a Total spending includes health plan payments and out-of-pocket spending by members (deductibles, coinsurance, and copayments).
n.a. = not applicable.

0.09-point decrease for SA services. Overall, health plan payments for MH/SA services increased by 58 cents per member per quarter following the implementation of parity. In other words, the cost of full parity to BCB-SVT amounted to about \$2.32 per member per year, or 19 cents per member per month.

Multivariate analysis provided evidence of the joint effects of managed care and parity on the level of health plan payments per user (Figure III.2). Although implementation of managed care constrained both MH and SA spending, parity offset this effect for MH services but not for SA services. Thus, spending for MH services was highest in an unmanaged parity environment. In contrast, spending for SA services was higher pre-parity, and higher still before the transition to managed care.

d. Changes in Kaiser/CHP Spending

Estimates of changes in Kaiser/CHP spending were imputed by applying BCBSVT unit costs to Kaiser/CHP utilization patterns.⁹ Based on this approach, overall MH/SA spending per member per quarter was estimated to have decreased by nearly 18 percent. Furthermore, health plan spending (net of patient out-of-pocket expenses) was esti-

⁹ These results should be interpreted with caution for two reasons. First, Kaiser/CHP unit costs may differ from those of BCBSVT. Second, out-of-pocket spending levels among Kaiser/CHP members (both pre- and post-parity) may differ from the aggregate assumptions applied based on BCBSVT member experiences. Therefore, these results should be considered illustrative of the potential effects of parity on spending for MH/SA services.

Figure III.2: Simulation of the Effects of Parity and Managed Care on Average Health Plan Spending per User per Quarter: Blue Cross Blue Shield of Vermont, 1996–1999

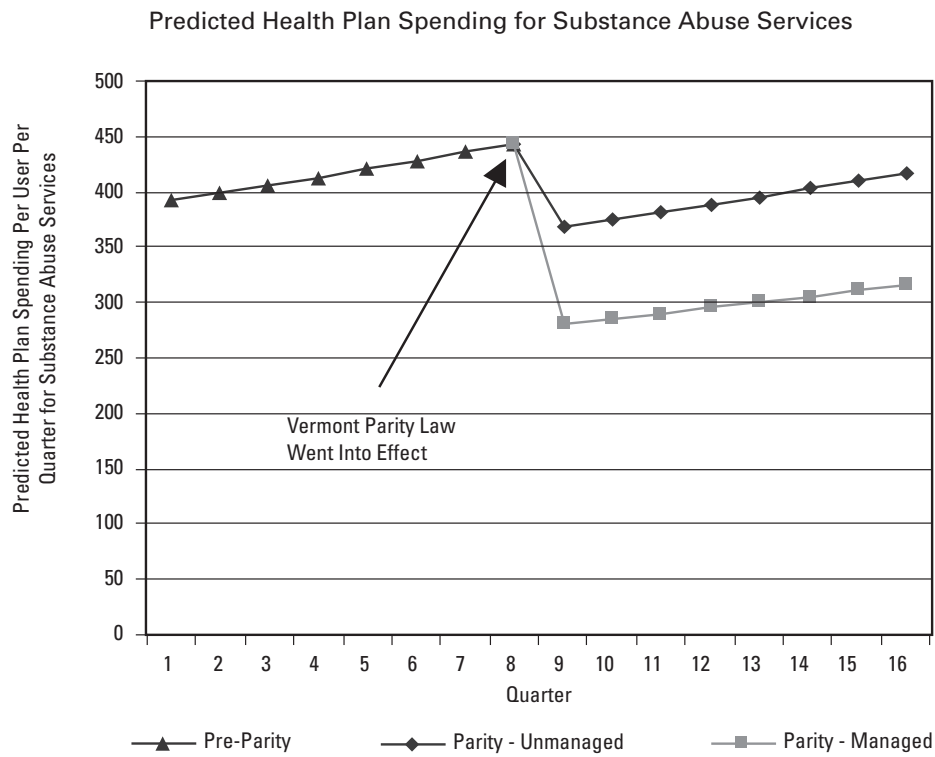
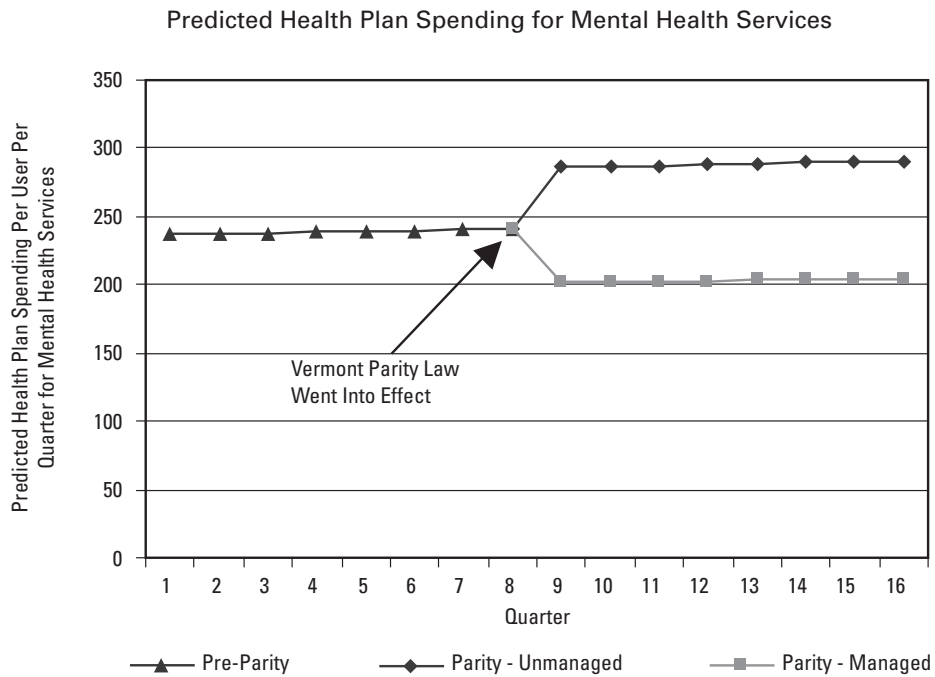


Table III.9: Median Out-of-Pocket Payments as a Percent of Total Mental Health Charges Among Members With a Serious Mental Condition, By Level of Mental Health Charges: Blue Cross Blue Shield of Vermont, 1996 and 1999

	<i>Out-of-Pocket Payments as a Percentage of Total Mental Health Charges (Median)</i>	
<i>Annual Level of Mental Health Charges</i>	<i>1996</i>	<i>1999</i>
\$1–\$500	50.0	19.3
\$501–\$1,000	32.0	20.0
\$1,001–\$2,500	27.1	20.3
\$2,501–\$5,000	18.4	14.1
More than \$5,000	9.0	4.4

*Includes BCBSVT members with a primary diagnosis of major depression, bipolar disorder, or schizophrenia.

mated to have decreased by about 9 percent following implementation of parity.¹⁰ This reduction was driven entirely by the decline in use of SA treatment.

e. Changes in MH/SA Spending for BCBSVT Members With Serious Mental Conditions

A more in-depth analysis was conducted of changes in the level of health plan payments and cost sharing among BCBSVT members with serious mental conditions (major depression, bipolar disorder, or schizophrenia). This population has the most to gain from parity, both in terms of higher utilization and lower cost sharing. During the study period, the proportion of users with health plan payments of \$5,000 or more increased from 3.9 percent in 1996 to 6.0 percent in 1999 (data not shown). At the same time, the proportion spending more than \$1,000 out-of-pocket decreased from 5.8 to 2.7 percent, as health plans assumed a larger share of the costs post-parity. Median out-of-pocket payments for high users (those with total mental health charges

more than \$5,000 per year) declined from 9.0 to 4.4 percent of their total charges (Table III.9).

Individuals with serious mental conditions who were relatively low users benefited substantially from the reduction of cost sharing (in relation to their total MH charges). For example, among those with total charges less than \$500 per year, the median out-of-pocket payment as a percent of total charges declined from 50 percent to 19 percent, as the higher coinsurance rate for MH services was eliminated. Thus, the cost of initiating an episode of treatment was lower following implementation of parity.

C. Discussion

The two dominant insurers in Vermont at the time parity was enacted—BCBSVT and Kaiser/CHP—offered sharply contrasting parity-implementation experiences, but generally similar results. Across both plans, significant increases in access to MH services were observed following implementation of parity. Parity was associated with an increased likelihood of obtaining any MH treatment. Parity also had a positive effect on

¹⁰ Due to limitations of the estimation methodology, the actual savings to Kaiser/CHP may have been somewhat lower.

the average number of outpatient visits per user within the two health plans.

However, these aggregate results do not mean that all health plan members experienced increases in outpatient MH access and utilization following implementation of parity. For those BCBSVT members who received their MH/SA benefits through the managed care carve-out, the effect of parity was offset by the use of managed care arrangements. Not only did the likelihood of obtaining outpatient treatment decline for those in the managed care carve-out, but also the average number of visits per user was lower.

Results were mixed across the two health plans with regard to use of inpatient or partial MH services. Kaiser/CHP members had a significantly lower likelihood of obtaining inpatient or partial MH treatment following parity, suggesting that outpatient MH services may have substituted for inpatient treatment. In contrast, among BCBSVT members, access to inpatient or partial MH treatment increased following parity, coupled with increases in outpatient MH treatment noted above.

There is considerable interest in how Vermont health plans responded to a full-parity law that includes SA treatment. Substantial reductions in access to substance abuse treatment were observed in both health plans (as measured by the number of users per 1,000 members), generally accompanied by large decreases in the number of services used per 1,000 members. BCBSVT members experienced an increase in the duration of inpatient and partial treatment; but, given the marked reduction in access to such treatment, this may have reflected the targeting of more intensive treatment to a

higher-severity case mix. As a result of these changes in patterns of access and use, average SA spending per BCBSVT member per quarter was nearly halved after parity.

This analysis revealed that overall spending for MH/SA services per BCBSVT member per quarter declined by 8 percent. However, due to declines in patient cost-sharing requirements, BCBSVT assumed an increasing share of total spending for MH/SA services. Thus, BCBSVT spending for MH/SA services rose by 4 percent. On the basis of this estimate, it is estimated that the cost of full parity in Vermont amounted to approximately \$2.32 per member per year, or 19 cents per member per month. As a percent of total health spending (across all types of services), the share attributable to MH/SA services rose 0.17 percentage points, from 2.30 to 2.47 percent.

Overall MH/SA spending per Kaiser/CHP member per quarter was estimated to have decreased by about 18 percent, while health plan spending decreased by about 9 percent following implementation of parity. This reduction was driven entirely by the decline in use of SA treatment by Kaiser/CHP members.

The analysis of MH/SA spending and utilization during the 2 years after adoption of parity in Vermont suggests that the initial costs associated with movement to full parity were minimal. This is due, however, to large reductions in SA utilization, and only a minimal expansion of MH utilization above levels covered prior to parity. These findings reflect the effects of implementing parity for MH/SA services in a managed care context.

IV.

Employer Perspectives on the Vermont Parity Law

Recognizing that the requirements of mental health/substance abuse (MH/SA) parity laws may affect small businesses adversely, the Federal government and 16 States have exempted small businesses from complying with the provisions of their parity laws. The Vermont parity law, however, applies to all employers regardless of size. Employers' responses to and attitudes toward the Vermont parity law provide important insights in designing and implementing MH/SA parity laws at the State and national levels. This chapter presents the results of a survey of Vermont employers, which assessed their awareness of, satisfaction with, and perceptions of the effects of the Vermont parity law.

Employer groups, especially those representing small businesses, tend to oppose MH/SA parity laws because of concerns about costs associated with expanded benefits and because they believe a benefit mandate reduces the level of choice available to employers in tailoring health insurance coverage to employee needs (U.S. Chamber of Commerce, 2000; National Association of Manufacturers, 2001; National Federation of Independent Business, 2001).

Small businesses are less likely than larger businesses to offer health insurance coverage. When they do offer coverage, their premiums for single coverage tend to be higher than those paid by larger firms (KFF/HRET 2001). Moreover, in recent years, smaller firms have faced greater premium increases than larger firms (Kaiser Family Foundation and Health

Research and Educational Trust, 2001), even though small businesses may be less able to absorb premium increases because of tight profit margins (National Federation of Independent Business, 2001). This evaluation included a survey of Vermont employers, providing an opportunity to compare the experiences of small and large businesses in implementing the Vermont parity law.

The survey was conducted from August to November 2000, more than two years after implementation of the parity law began. Findings are divided into four sections: (1) employer awareness of the Vermont parity law; (2) their assessment of the effects of the law to date; (3) their satisfaction with the law; and (4) their recommendations for improving the law in the future. Findings are presented by firm size, which is defined

according to four categories: (1) fewer than 10 employees, (2) 10 to 25 employees, (3) 26 to 50 employees, and (4) more than 50 employees. Significance testing was performed to determine the statistical significance of differences between firms according to size.¹ Refer to Appendix D for the survey methods and background information on the characteristics of Vermont employers by firm size.

A. Employer Awareness of the Vermont Parity Law

The survey measured employer awareness of the Vermont MH/SA parity law, how employers learned about the law, how confident they were that they understood the law, how they notified employees about the law, and how well they thought their employees understood the law. Many employers were unaware of the law; among those who knew about it, their self-reported level of understanding was relatively low. Moreover, these employers felt the level of understanding among their employees was even lower.

1. Employer Knowledge of the Parity Law

Nearly half (46 percent) of the fully insured employers in Vermont reported that they had not heard of the Vermont parity law at the time of the survey (Table IV.1).² The level of

familiarity with parity was highest in very small businesses (fewer than 10 employees). For example, in firms with fewer than 10 employees, 41 percent of respondents indicated they had not heard of parity; 52 percent of firms with more than 50 employees did not know about the law.³

Among fully insured employers who had heard about the Vermont parity law, their three main sources of information were health insurance plans (44 percent), the media (43 percent), and insurance brokers (33 percent). The Chamber of Commerce, professional or trade associations, and the State government each were reported as a source of information by 12 to 14 percent of insured employers who had heard of the parity law. The majority of employers (56 percent) reported a single source of information, but a sizable proportion received information from three or more sources (23 percent) (see Table IV.2).

Among fully insured employers in which someone had heard of parity, about 40 percent responded that management knew most of what they needed to know about parity; another 31 percent felt they knew some of what they needed to know; and 29 percent indicated they knew almost nothing about

¹ Firm size is defined as very small (fewer than 10), small (10 to 25), medium (26 to 50), and large (more than 50).

² Fully insured employers purchase coverage for their employees from an insurance company or health plan. Employers who are self-insured, or self-funded, pay the claims directly (or under an arrangement with an administrative-services-only contract). Most self-insured plans were exempt from the Vermont parity law due to the Federal preemption under ERISA, although they were subject to the more limited requirements of the Federal parity law. However, self-insured plans administered by Blue Cross Blue Shield of Vermont (BCBSVT) were not exempt from the Vermont parity law because

BCBSVT issued a certificate to the subscriber. (The State considers such policies as insured by BCBSVT rather than self-funded by the employer.) For the purpose of this analysis, businesses that offered both fully insured and self-insured plans were classified as fully insured plans, since at least one of their plans was subject to parity. There were not enough businesses with both types of plans to perform a separate analysis.

³ The interview was conducted with the person who was most familiar with the parity law. When a respondent reported that he or she had not heard about the parity law, the interviewer asked if there was anyone else in the firm who might be familiar with it. In such cases, the interviewer called back to talk to the most knowledgeable person.

Table IV.1: Knowledge of the Vermont Parity Law, by Firm Size, %				
	All Firms	Number of Employees		
		Fewer Than 10	10 to 25	26 to 50
Percentage of Employers Where No One Was Familiar With the Parity Law	45.8	40.5*	46.3	55.5
Level of Understanding Among Management (chi-sq = 10.63) ^a				
Most of what they need to know	39.7	42.1	31.4	33.1
Some of what they need to know	31.3	32.7	29.2	33.5
Almost none of what they need to know	29.0	25.2	39.4	33.4
Percentage of Employers With No or Almost No Knowledge of the Parity Law ^{a,b}	61.5	55.5	67.4	70.4
Level of Understanding Among Employees (chi-sq = 9.26) ^a				
Most of what they need to know	33.4	41.6	26.8	26.0
Some of what they need to know	26.2	31.1	12.3	34.1
Almost none of what they need to know	40.5	27.3	60.9	39.9
				35.0
				36.7
				28.3

Source: Mathematica Policy Research Survey of Vermont Employers to Assess the Impact of the Vermont Parity Act.

Note: The survey includes Vermont businesses that were in operation as of January 1, 1998 and that remained in operation as of the time of the survey (Fall 2000). The survey excluded those that had, on average, fewer than five employees across establishments in calendar year 1999 and businesses operated by Federal and State Government entities. This table is limited to fully insured businesses that were subject to the Vermont parity law.

^a Among employers where someone had heard about the parity law.

^b The percentage of employers with no or almost no knowledge of the parity law is a composite measure reflecting the percentage of employers where no one was familiar with the parity law, plus the percentage with almost no knowledge of the parity law.

* Significantly different from employers with more than 50 employees at the .10 level, two-tailed test.

Table IV.2: Sources of Information About Parity	
<i>Sources of Information</i>	<i>Percentage of Employers^a</i>
Health insurance plan	44.2
Media	42.9
Insurance broker	33.4
Chamber of Commerce	14.4
Professional/trade association	12.6
State government	11.9
Benefit consultant	8.7
Attorney	6.6
Another company	3.4
Vermont business roundtable	2.8
Other	8.7

^a Includes fully insured businesses where someone had heard of the parity law.

Table IV.3: Approaches Used by Employers to Notify Employees About the Parity Law	
<i>Type of Notification</i>	<i>Percentage of Employers^a</i>
Written notification	64.6
Employee meetings	46.7
Newsletter	15.4
E-mail	2.3
Union	0.7
Other	3.1

^a Includes fully insured businesses where someone had heard of the parity law.

parity (Table IV.1). The level of knowledge was highest at the two extremes of firm size: 56 percent of the large firms and 42 percent of the very small firms reported that their management knew most of what they needed to know about the parity law, in contrast to 31 to 33 percent of small and medium-sized firms.

Based on employer response, a composite measure was constructed of the percentage of employers with little or no knowledge of the parity law. Overall, these data suggest that about three-fifths of employers either had not heard about parity or knew almost nothing of what they felt they need-

ed to know, ranging from 56 to 58 percent of the very small and large businesses to 67 to 70 percent of the small and medium-sized businesses.⁴

2. *Employee Knowledge of the Parity Law*

Among the fully insured employers that had heard about parity, most notified their employees about the parity law following its implementation in 1998 (or upon renewal of the insurance contract). Only 7 percent indicated they had not notified their employees about parity (data not shown). Of those who notified employees, nearly two-thirds indicated they had issued a written notification about the benefit changes and nearly half conducted meetings with employees (see Table IV.3).

When asked about their employees' understanding of parity, employers reported a lower level of awareness of parity among their employees than among management: 41 percent reported that their employees knew almost nothing about the parity law (Table IV.1). (There were no significant differences by firm size.) Employers' perceptions of the lack of knowledge of the parity law among consumers were consistent with anecdotal reports gathered during the case study, which indicated that many consumers

⁴ It is possible that this estimate understates the level of knowledge about parity to the extent that there were others in the firm who knew about parity but who were not interviewed during this survey. This would be especially plausible if the level of knowledge were lower in the large firms, in which there is greater division of labor for employee benefits, health insurance purchasing, employee relations, and other functions. In small firms, however, it is more likely that the survey would have identified someone who was knowledgeable about parity, given the multitude of probes asking to speak with an individual who was familiar with the parity law.

were unaware of parity following its implementation (see Chapter II).

B. Employers' Perceptions of the Effects of the Parity Law

The analytic framework presented in Chapter I hypothesized that Vermont employers and employees could be affected in various ways following implementation of an MH/SA parity law. First, employers may experience premium increases from insurers to cover the estimated cost of increased access and utilization. In response, they may decide to discontinue health insurance coverage altogether or switch from fully insured plans to self-insured products that are exempt from parity. Alternatively, employers may opt to pass all or part of the premium increases on to employees in the form of higher premium contributions or lower wages (which could result in reduced employee participation).

In addition, to control costs, employers may change the mix of products they offer or introduce managed care for MH/SA services. Moreover, employers may attempt to avert cost and utilization increases by contracting with employee assistance plans, or they may screen for higher risks by initiating drug screening among job applicants or current employees. Employers also may decide to monitor their health care costs and utilization more intensively, so they can be proactive in the future. Finally, employers may enjoy certain benefits from parity to the extent that employees gain access to needed MH/SA services. In such cases, productivity may increase and absenteeism may decrease.

This section presents descriptive information on employers' perceptions of changes that have taken place since parity went into

effect (as of January 1, 1998 or upon contract renewal). Employer responses were disaggregated by firm size. In addition, results are presented separately for fully insured versus self-insured businesses, since the latter were not subject to the parity provisions. To gauge the role of parity in bringing about the reported changes, fully insured businesses were asked to assess the effect of the parity law on any changes that they reported.

1. Effects on Health Care Costs

An underlying driver of employer responses is the actual or anticipated effect of parity on health care costs. Nine out of 10 employers reported that their health insurance premiums had increased since parity went into effect (Table IV.4). Fully insured businesses were more likely than self-insured ones to report premium increases (93 percent versus 83 percent). Of the fully insured businesses reporting premium increases, one-third indicated the parity law was not a reason, and nearly half (47 percent) did not know whether parity was a contributing reason. Only 12 percent indicated parity was a main or important reason, and the remaining 9 percent reported it was one of many reasons.

Employers were asked to report the single most important factor contributing to increased premiums (see Table IV. 5).⁵

⁵ Specifically, the survey asked: "Was it increased utilization, cost-of-living adjustments, changes in types of health insurance plans offered, or another factor?" Nearly half of the initial responses were coded as "other," and a verbatim response was recorded. Where possible, these open-ended responses were recoded into the specified categories, and two additional categories were created: costs in general and government regulation. In addition, the category called "changes in types of health insurance plans offered" was expanded to include changes in the Vermont health insurance market.

Table IV.4: Recent Changes in the Characteristics of Employer-Sponsored Health Insurance as Reported by Vermont Employers and the Extent to Which Parity Was a Factor in the Change, %

<i>Type of Change</i>	<i>All Insured Employers</i>	<i>Number of Employees</i>				<i>Plan Funding^a</i>		<i>Extent to Which Parity Was a Factor in the Change^b</i>			
		<i>Fewer Than 10</i>	<i>10 to 25</i>	<i>26 to 50</i>	<i>More Than 50</i>	<i>Fully Insured</i>	<i>Self-Insured</i>	<i>Main or Important Reason</i>	<i>One of Many Reasons</i>	<i>Not a Reason at All</i>	<i>Don't Know</i>
Change in the Level of Health Insurance Premiums											
Increased	92.1	91.0	93.3	91.6	92.4 **	82.8	93.4 *	11.8	9.4	32.3	46.5
Decreased	2.2	4.1	0.0	1.9	1.4	5.4	1.7	—	—	—	—
Stayed about the same	5.8	4.6	6.7	6.5	6.2	11.8	4.9	n.a.	n.a.	n.a.	n.a.
Change in the Level of Monitoring of Health Insurance Costs and Utilization											
Increased	15.9	9.9	17.2	19.5	25.4 ***	29.5	13.8 ***	1.2	7.6	13.2	78.1
Decreased	0.7	0.0	2.0	0.0	0.0	2.6	0.4	—	—	—	—
Stayed about the same	83.5	90.1	80.8	80.5	74.6	67.9	85.8	n.a.	n.a.	n.a.	n.a.
Change in the Funding of Health Plan(s) from Fully Insured to Self-Insured											
	4.1	2.6	1.2	6.7	11.9 ***	0.0	27.1 ***	1.7	1.7	18.0	78.6
Change in the Level of Employee Contribution to Premium Expense											
Increased	37.7	27.6	40.3	44.9	50.7 ***	36.4	37.9	8.7	4.9	37.9	48.5 *
Decreased	4.1	3.6	4.9	4.4	3.1	5.8	3.8	0.0	0.0	13.9	86.1
Stayed about the same	58.3	68.8	54.9	50.7	46.1	57.8	58.3	n.a.	n.a.	n.a.	n.a.
Change in Percentage of Eligible Employees Choosing to Participate in Health Plans											
Increased	13.5	6.7	19.2	13.6	17.5 ***	11.9	23.9 *	0.0	0.0	0.0	100.0 *
Decreased	6.7	8.8	3.7	5.8	8.9	7.0	4.4	16.0	0.0	8.3	75.7
Stayed about the same	79.9	84.5	77.1	80.7	73.6	81.1	71.7	n.a.	n.a.	n.a.	n.a.

Table IV.4 continued											
Type of Change	All Insured Employers	Number of Employees				Plan Funding ^a		Extent to Which Parity Was a Factor in the Change ^b			
		Fewer Than 10	10 to 25	26 to 50	More Than 50	Fully Insured	Self-Insured	Main or Important Reason	One of Many Reasons	Not a Reason at All	Don't Know
Change in Percentage of Eligible Employees Electing Dependent Coverage											
Increased	8.8	6.3	7.5	14.8	12.6 **	7.3	19.5 **	0.0	0.0	0.0	100.0
Decreased	8.6	9.7	7.5	6.7	10.4	8.9	6.9	12.5	12.9	2.4	72.3
Stayed about the same	82.6	84.0	85.0	78.5	77.0	83.8	73.6	n.a.	n.a.	n.a.	n.a.
Change in the Number of Health Plan Choices Offered											
Increased	8.4	10.4	5.6	9.1	8.9	8.0	11.0	13.1	0.0	11.9	75.0
Decreased	5.5	5.1	3.4	9.2	7.8	5.6	5.0	15.6	8.0	11.7	64.7
Stayed the same	86.1	84.5	91.0	81.7	83.3	86.4	83.9	n.a.	n.a.	n.a.	n.a.
Change in any Insurance Coverage from Fee-for-Service to Managed Care											
Medical/surgical	5.5	3.2	6.1	5.6	9.6 *	5.6	4.5	2.2	10.5	10.3	76.9
Mental health	4.2	2.1	4.6	5.5	7.5 *	4.6	1.8 *	3.1	14.8	14.4	67.7
Substance abuse	4.0	2.1	4.7	3.7	7.5 *	4.3	1.8 *	3.1	14.8	14.4	67.7
Implementation of a New Employee Assistance Program (EAP) ^c	1.4	0.0	1.4	1.5	4.7 ***	0.8	5.0 ***	—	—	—	—
Change in the Number of Vermont-Based Employees											
Increased	31.8	19.3	36.3	35.8	49.1 ****	31.3	35.7	0.0	0.0	0.5	99.5
Decreased	10.0	12.1	9.6	6.2	9.1	9.7	12.0	0.0	0.0	6.8	93.2
Stayed about the same	58.2	68.6	54.0	58.0	41.8	59.0	52.4	n.a.	n.a.	n.a.	n.a.
Change in the Absenteeism Rate of Vermont-Based Employees											
Increased	8.2	4.1	10.6	9.5	12.0 *	8.8	3.6 **	0.0	2.5	36.7	60.9
Decreased	4.0	2.7	4.9	4.2	5.1	4.2	2.7	—	—	—	—
Stayed about the same	87.8	93.2	84.4	86.3	83.0	87.1	93.7	n.a.	n.a.	n.a.	n.a.

Table IV.4 continued

Type of Change	All Insured Employers	Number of Employees				Plan Funding ^a		Extent to Which Parity Was a Factor in the Change ^b			
		Fewer Than 10	10 to 25	26 to 50	More Than 50	Fully Insured	Self-Insured	Main or Important Reason	One of Many Reasons	Not a Reason at All	Don't Know
Change in the Productivity Level of Vermont-Based Employees Increased Decreased Stayed about the same	28.0	27.7	29.1	25.6	28.6 *	26.8	37.0 *	0.6	1.7	0.6	97.2
	4.4	5.9	1.3	6.4	6.1	3.9	8.5	—	—	—	—
	67.6	66.4	69.6	68.0	65.2	69.3	54.5	n.a.	n.a.	n.a.	n.a.

Source: Mathematica Policy Research Survey of Vermont Employers to Assess the Impact of the Vermont Parity Act.

Note: The survey includes Vermont businesses that were in operation as of January 1, 1998 and that remained in operation as of the time of the survey (fall 2000). The survey excluded those that had, on average, fewer than five employees across establishments in calendar year 1999 and businesses operated by federal and state government entities. This table is limited to insured businesses only.

^a Fully insured employers purchase coverage for their employees from an insurance company or health plan. Self-insured firms pay the claims directly (or through an arrangement with an administrative-services-only contract).

^b This question was asked only of fully insured employers where someone had heard of parity.

^c This question was asked only of those with an EAP at the time of the survey.

n.a. = not applicable; — = insufficient data.

* Distribution by firm size or plan funding is significantly different than what would be expected by chance alone, based on a chi-square test ($p < .10$).

** Distribution by firm size or plan funding is significantly different than what would be expected by chance alone, based on a chi-square test ($p < .05$).

*** Distribution by firm size or plan funding is significantly different than what would be expected by chance alone, based on a chi-square test ($p < .01$).

Table IV.5: Vermont Employers' Assessment of Factors Contributing to Premium Increases, by Firm Size, %

	<i>All Firms^a</i>	<i>Number of Employees</i>			
		<i>Fewer Than 10</i>	<i>10 to 25</i>	<i>26 to 50</i>	<i>More Than 50</i>
Total	100.0	100.0	100.0	100.0	100.0
Costs in general	32.7	37.5	42.5	20.0	13.3
Increased utilization	26.6	18.4	15.7	33.8	61.2
Changes in the Vermont insurance market	18.0	23.0	17.2	18.5	7.8
Cost of living adjustments	10.7	9.2	11.7	12.5	10.6
Government regulation	6.0	7.2	5.8	8.0	2.1
Other factors	6.0	4.7	7.2	7.3	5.0

^a Includes fully insured and self-insured businesses reporting a premium increase since January 1, 1998.

- Costs in General.** This was the most common response—reported by one-third of the employers that experienced premium increases. This category includes such responses as “the insurance company just raised rates, no explanation,” or “cost of doing business by the insurance company,” or “nothing we did, insurance company just raised rates.” A few employers suggested that recent cost increases could be due to the underwriting cycle: “Hadn’t increased in four years, then hit us all at once with [an] increase.” Businesses with 25 or fewer employees (38 to 42 percent) were more likely to report “costs in general” than were businesses with more than 25 employees (13 to 20 percent).
- Increased Utilization.** The second most common response, reported by 27 percent of employers, was increased utilization. Employers typically cited more than one type of utilization driving the recent cost increases, including medical/surgical (21 percent), pharmacy (19 percent), and MH/SA services (13 percent). Of the employers reporting increased utilization as the primary cost driver, fully insured employers (55 percent) were more likely than self-insured employers (24 percent) to report that increased utilization of MH/SA services was a factor in increased costs (data not shown).
- Changes in the Vermont Insurance Market.** Eighteen percent attributed recent changes in premiums to changes in the Vermont health insurance market, especially reduced competition resulting from health plan exits. For example, one employer responded: “[there is] no competition for health care [insurance] in Vermont, so they can raise it as high as they want.” Others reported that premiums increased due to requirements for community rating of products sold in Vermont’s small-business market (which applied to Vermont firms with 50 or fewer employees). Businesses with 50 or fewer employees were more likely to report that market-related factors were affecting their premiums than those with larger numbers of employees.
- Cost of Living Adjustments.** Eleven percent suggested that premiums were rising primarily due to inflation in health care costs.

- **Government Regulation.** Six percent thought the main cost driver was government regulation. Employers cited as factors “State regulation” and “State mandates,” including parity.
- **Other Factors.** The remaining 6 percent reported other factors or were unable to attribute the cost increase to a single factor.

Few employers (16 percent) reported that they had increased their monitoring of health insurance costs and utilization following implementation of parity (Table IV.4). Self-insured firms (30 percent) and large firms (25 percent) were more likely than their counterparts to report increased monitoring. It is unclear, however, whether increased monitoring among fully insured employers was attributable to parity, since 78 percent reported that they did not know the extent to which parity was a factor.

Looking ahead, 64 percent of fully insured employers indicated they were “very” or “somewhat” concerned about the effects of parity on future health insurance costs (see Table IV. 6). The remaining 36 percent indicated they were only a little concerned or not concerned at all. Large businesses were less likely than other firms to report that they were very or somewhat concerned about the effects of parity on health insurance costs in the future. Specifically, 60 percent of businesses with fewer than 10 employees, 73 percent of those with 10 to 25 employees, and 65 percent of those with 26 to 50 employees were very or somewhat concerned, compared to 49 percent of large businesses (more than 50 employees).

2. *Discontinuation of Employer-Sponsored Coverage*

Although most employers reported that their premiums had increased since parity

went into effect, very few dropped their insurance coverage—and even fewer attributed the change to the Vermont parity law. Of the employers offering insurance coverage as of January 1, 1998, the date parity went into effect, 1.6 percent reported that they had dropped their insurance coverage since that date (data not shown). However, taking into account the reasons that employers may drop their coverage, an even smaller proportion—0.3 percent—reported that parity was the main or an important reason for their decision.⁶ It is estimated that only 0.07 percent of Vermont employees worked for employers who said parity was the main or an important factor in their decision to discontinue coverage.

3. *Changes from Fully Insured to Self-Insured Coverage*

Because self-insured plans were exempt from the Vermont parity law, employers may have faced an incentive to switch coverage from fully insured to self-insured products. Therefore, to the extent that employers chose to self-insure as a result of parity, the law’s effect may have been diminished. As shown in Table IV.4, 4 percent of Vermont employers switched one or more of their plans from a fully insured to a self-insured product, thereby exempting the self-insured plan from the requirements of the Vermont parity law. Because large employers were more likely to make such a switch, a disproportionate share of employees potentially

⁶ Due to the small number of employers discontinuing coverage, it is not possible to develop reliable estimates of their characteristics.

Table IV.6: Level of Concern About the Effects of Parity on Health Insurance Costs in the Future, by Firm Size, %

	<i>All Firms^a</i>	<i>Number of Employees</i>			
		<i>Fewer Than 10</i>	<i>10 to 25</i>	<i>26 to 50</i>	<i>More Than 50</i>
Total	100.0	100.0	100.0	100.0	100.0
Very concerned	27.8	33.6	20.6	31.1	25.2
Somewhat concerned	36.4	26.8	52.3	33.4	23.6
Only a little concerned	20.9	20.0	21.6	15.0	28.8
Not concerned at all	14.9	19.6	5.5	20.5	22.5

^a Includes fully insured employers where someone had heard of the parity law.

were affected—roughly 8 percent of Vermont employees were employed in firms that switched from fully insured to self-insured coverage (data not shown).⁷

Of Vermont employers who were self-insured at the time of the survey, 27 percent had changed at least one of their products from fully insured to self-insured since implementation of parity. However, the majority of these employers (79 percent) were unable to report whether parity was a factor in the shift to self-insured plans, while another 18 percent reported that parity was not a factor at all. Only 3 percent indicated that parity was a main, important, or contributing factor.

4. Effects on Employee Premium Contributions

Although 90 percent of Vermont employers indicated that they had experienced premium increases since parity went into effect, only 38 percent indicated that they had increased employee contributions to premium expenses

(Table IV.4). These findings mirror those of national studies that suggest employers have not passed on premium increases to employees as a result of a strong economy and low unemployment (EBRI, 2001). Large businesses were more likely than very small businesses to report that they had passed increased costs on to employees (51 versus 28 percent). Only 5 percent of fully insured employers (14 percent of 38 percent) reported that parity played a role in the increased premium contributions by employees.

5. Effects on Employee and Dependent Participation in Health Plans

In addition to concerns that employers might drop coverage as a result of parity, there were concerns that employee participation might decline if employers shifted increased costs to employees. The majority of Vermont employers reported no change in employee or dependent participation (possibly because most employers did not raise employee premium contributions, as discussed above). About 14 percent of employers reported increased participation among employees, while 7 percent reported decreased participation.

About 9 percent of employers reported increased participation among dependents,

⁷ This estimate overstates the proportion of Vermont employees actually affected by the shift to self-insured plans, to the extent that some employees obtained coverage through fully insured products that continued to be offered or did not take up health insurance coverage through the employer.

while a similar proportion reported decreased participation. Increased participation was more likely to be reported by self-insured businesses.

Among fully insured businesses reporting a change in employee or dependent participation, few were able to assess the role of parity in contributing to increased or decreased participation. Although it appears that employers reporting decreased participation among employees or dependents were more likely to attribute the change, at least in part, to the parity law, the overall effect on the fully insured market was very small. Only about 1 percent of fully insured employers reported decreased employee participation in health plans and cited the parity law as a main or important reason. About 2 percent of employers reported that parity had some effect on dependent participation. Thus, based on employer reports, the magnitude of effects attributable to parity is extremely small.

6. *Effects on the Number and Type of Health Plan Choices*

The majority of employers reported that they did not change the number of health plan choices offered to employees, nor did they report changing insurance coverage from fee-for-service to managed care (Table IV.4). Eighty-six percent of fully insured employers indicated that the number of health plan choices stayed the same. Another 8 percent increased the number of choices, and 6 percent reduced the number of choices. Only 2 percent of fully insured employers reported

that they changed the number of health plan choices specifically because of parity.⁸

Only a few employers reported that they had shifted any of their insurance coverage from fee-for-service to managed care. This might be considered surprising, given that the largest insurer in Vermont—Blue Cross Blue Shield of Vermont—carved out MH/SA services in their indemnity contracts and contracted with a managed behavioral health organization to administer the benefit coincident with the implementation of parity. This likely reflects the fact that employers did not make the decision nor did they sign a managed care contract; instead, the insurer made the change.

7. *Effects on Other Health-Related Activities*

About 12 percent of Vermont employers offered an employee assistance program (EAP) at the time of the survey.⁹ The likelihood of offering an EAP increased with firm size, ranging from 3 percent of firms with fewer than 10 employees to 32 percent of firms with more than 50 employees (data not shown).

Since the parity law was implemented, only about 1 percent decided to add an EAP benefit, suggesting that employers did not respond to the parity law by implementing an EAP to control health care costs (Table IV.4). Among firms with an EAP, about 10 percent implemented a new requirement that

⁸ This estimate is a composite of the percent reporting that parity played a role in increasing the number of health plan choices (13 percent of 8 percent) plus the percent reporting that parity played a role in decreasing the number of health plan choices (24 percent of 6 percent).

⁹ Employee assistance programs are designed to provide counseling and referral services to assist workers with personal problems that may adversely affect their performance on the job. EAPs generally address a wide range of problems, including those related to drug and alcohol abuse and mental health conditions, as well as marriage and family issues and financial and legal problems (Zarkin and Garfinkel, 1994).

Table IV.7: Overall Satisfaction With the Vermont Parity Law, by Firm Size, %

<i>Overall Satisfaction With the Parity Law</i>	<i>All Firms^a</i>	<i>Number of Employees</i>			
		<i>Fewer Than 10</i>	<i>10 to 25</i>	<i>26 to 50</i>	<i>More Than 50</i>
Total	100.0	100.0	100.0	100.0	100.0
Very satisfied	20.1	20.5	18.5	19.8	24.1
Somewhat satisfied	49.6	43.8	55.9	44.7	53.4
Somewhat dissatisfied	17.2	14.2	22.6	20.6	6.7
Very dissatisfied	13.1	21.4	3.0	14.9	15.7

^a Includes fully insured businesses where someone had heard of the parity law.

employees must contact the EAP before obtaining MH/SA services, a requirement significantly more likely to be implemented by fully insured firms (13 percent) than by self-insured firms (2 percent).

Another possible response to parity would be to implement drug screening for job applicants, current employees, or both. Drug screening can deter drug users from applying or can lead to early intervention for employees. At the time of the survey, 11 percent of employers reported that they screened job applicants; 16 percent screened current employees. Of these employers, 10 percent reported that they implemented the requirement after parity went into effect (for a multiplicative effect of about 2 percent of all employers). Because only a small number of Vermont employers conducted drug screening at the time of the survey, there were too few observations to determine the effect of parity on the initiation of drug screening among fully insured businesses.

8. Changes in Other Aspects of the Business

There is considerable interest in the extent to which parity may affect such aspects of a business as the size of its workforce, its productivity, or its level of absenteeism. As shown in Table IV.4, about one-third of employers reported that the number of

Vermont-based employees increased since implementation of parity, while about 10 percent reported that the number decreased. In general, the economy was strong during this period, which may account for the level of expansion in the workforce. Slightly more than one-fourth of Vermont employers reported increased productivity since implementation of parity. In addition, a small proportion reported changes in absenteeism (8 percent reported increases and 4 percent reported decreases). Employers generally were unable to determine whether parity was a factor in any of these changes.

C. Employer Satisfaction with the Vermont Parity Law

More than two-thirds of fully insured Vermont employers who had heard about parity indicated that they were satisfied with the parity law overall; 20 percent were very satisfied, 50 percent were somewhat satisfied, 17 percent were somewhat dissatisfied, and 13 percent were very dissatisfied. Large firms (more than 50 employees) were more likely than other firms to report satisfaction with the law (Table IV.7).

Vermont employers who reported that they were “very satisfied” or “very dissatisfied” with the parity law overall were asked what factors motivated their response. Several common themes emerged from the

open-ended responses, illustrating their attitudes and perceptions. The 20 percent of Vermont employers who said they were “very satisfied” cited the following general reasons for their high level of satisfaction with the parity law:

- ***Because coverage should be equal.*** “Finally getting equal treatment with other illnesses.” “It creates better fairness [and] more access for more people.” “I think it’s great; I think mental illness is a physical condition [and] with drug abuse it could be attributable to brain disorders.” “I think that people should have access to treatment; it’s hard enough to know that they have to have treatment without having to pay more.” “Mental health is just as important or even more so.” “Because I think it’s the right thing to do; [I] spent years trying to explain why mental health and substance abuse services weren’t covered [equally].” “It’s a good thing; [I’ve] been handling benefits for many years and there used to be caps and now it’s treated like a medical problem.”
- ***Because people need it.*** “Glad that it is an option because a lot of people need it and could not afford it on their own, more so because of stresses of modern life.” “I think it is an important part of people’s life; the coverage is needed for that.” “Because the services are necessary and should be mandated.” “[It] provides services to people who ordinarily would not get them.” “Part of keeping the person well.”
- ***Because it will help retain employees or make them more productive.*** “I would say in this line of work, we’ve got to have it.” “This is an area where our staff needs

support; it’s an asset for us to be able to provide the coverage in our plan.” “It is very important to look at mental health issues to retain employees.”

Among the 13 percent who indicated they were “very dissatisfied” with the parity law, the following themes dominated their responses:

- ***Because employers should have the choice whether to cover or not.*** “Too much control over choice.” “We are not a socialist country; we want more choice [and] less government mandates.” “I should not be forced to offer it.” “I don’t think it should be forced on the entire populace of Vermont.” “Paying for substance [abuse] ... is a person’s choice and you’re paying for all, whether it is used or not.”
- ***Because of concerns about costs.*** “Too costly.” “The majority pay[s] for the few.” “It has increased our cost so much, which causes us to not be able [to offer] the insurance program we want.”
- ***Because there was not enough information.*** “How can I be satisfied with something I know nothing about?”

Vermont employers also were asked to rate their satisfaction with specific aspects of the parity law. Table IV.8 displays satisfaction ratings for two types of responses: very satisfied and somewhat satisfied. On average, the highest satisfaction rating was given to the effect of parity on improving employee access to MH/SA services (79 percent), while the lowest satisfaction ratings were given to the availability of information to explain parity (48 percent) and the effect of parity on health care costs (47 percent). Employers reported higher levels of satisfaction with the availability of information from health plans to monitor their health care costs and utiliza-

Table IV.8: Employer Satisfaction With Selected Aspects of the Vermont Parity Law, by Firm Size, %

	<i>All Firms^a</i>	<i>Number of Employees</i>			
		<i>Fewer Than 10</i>	<i>10 to 25</i>	<i>26 to 50</i>	<i>More Than 50</i>
<i>Percentage very satisfied or somewhat satisfied with:</i>					
Effects of the parity law on improving employee access to mental health/substance abuse (MH/SA) services	78.9	73.9	83.8	81.5	77.1
Type of information from health insurance plan for monitoring costs and utilization	62.2	56.7 **	67.3	50.7 **	78.0
Availability of information explaining the parity law	47.6	34.8 **	50.1 **	52.2 **	80.3
Effects of the parity law on health care costs	47.1	35.0 **	51.0	53.5	69.3
<i>Percentage very satisfied with:</i>					
Effects of the parity law on improving employee access to MH/SA services	27.7	31.7	23.4	30.3	25.1
Type of information from health insurance plan for monitoring costs and utilization	11.7	9.0 *	9.4 *	18.4	23.4
Availability of information explaining the parity law	10.2	5.9 **	8.1 **	17.1	26.2
Effects of the parity law on health care costs	12.2	10.8	11.4	19.3	12.7
<i>Percentage somewhat satisfied with:</i>					
Effects of the parity law on improving employee access to MH/SA services	51.2	42.2	60.4	51.2	52.0
Type of information from health insurance plan for monitoring costs and utilization	50.5	47.6	57.9	32.3 **	54.6
Availability of information explaining the parity law	37.4	28.8 **	42.0	35.1 *	54.2
Effects of the parity law on health care costs	34.9	24.1 **	39.6	34.2 *	56.6

Source: Mathematica Policy Research Survey of Vermont Employers to Assess the Impact of the Vermont Parity Act.

Note: The survey includes Vermont businesses that were in operation as of January 1, 1998 and that remained in operation as of the time of the survey (Fall 2000). The survey excluded those that had, on average, fewer than five employees across establishments in calendar year 1999 and businesses operated by Federal and State government entities. This table is limited to fully insured businesses where someone had heard of the parity law.

* Significantly different from employers with more than 50 employees at the .05 level, two-tailed test.

** Significantly different from employers with more than 50 employees at the .01 level, two-tailed test.

tion (62 percent) than with the availability of general information regarding the parity law.

There were a few variations in employers' satisfaction ratings according to their size. In general, large employers tended to report higher satisfaction ratings. For example, 80 percent of large employers (50 or more employees) were satisfied with the availability of information about the parity law, compared to only 35 percent of the very small employers (fewer than 10 employees). Further, large employers were more likely than smaller companies to report that they were satisfied with the availability of information about health care costs (78 percent versus 57 percent). Finally, 69 percent of the large employers, but only 35 percent of the very small employers, reported satisfaction with the effects of parity on their health care costs.

D. Employer Recommendations for Improving the Parity Law

Employers were asked how to improve the parity law in the future. About one-fourth of the fully insured businesses that had heard about parity made a suggestion for improving the parity law. By far, the most common response was that employers needed more information on the parity law—both for themselves and for the public. Illustrative responses included:

- ***Increase employer education.*** “Get out more information to companies so people could understand it better.” “Let business owners know what the services are.”
- ***Increase public education.*** “Get more information out to the public.” “More public information that these conditions should be treated as a physical condition; it's as important as cancer.” “More people need to become aware.”

Others suggested that there is not enough information about the costs of parity to insurers and employers. For example:

- ***Increase information about costs.*** “Give us more information on the law and what it will cost us.” “Make it a real number in insurance so I know how much money we are talking about.” “Does the law affect our premiums?” “I think the insurance should be required to disclose the utilization and costs related to services before they are allowed to raise rates, and they should not be allowed to hide the profit under administration and operating [expenses].”

Other employers had specific suggestions for improving the administration of MH/SA parity benefits. Some, for example, recommended that more attention be paid to how employees gain access to services:

“Some people complain about the roadblocks that are placed upon them to get services.”

“[Our] current insurance company does not deal with mental health providers employers already [were] dealing with. All mental health providers were not listed in their contracts.”

“Guidelines need to be very well defined. Some people take advantage of the system.”

One employer cited the complexity that employers with businesses in multiple states faced: “There should be consistent policies for all states; makes it hard for employers with employees in different states.... Expense for employers [is] prohibitive and to keep each state straight is difficult.”

Only a few employers expressed such dissatisfaction that they recommended that the parity law should be optional or should be repealed altogether. For example, one felt it

was “not the same as any illness,” while another stated that “options should be available only to those who want them and should not be required.”

E. Discussion

This analysis has shown that the majority of Vermont employers were at least somewhat satisfied with the parity law overall and that they were particularly satisfied with the prospect of parity to increase their employees’ access to MH/SA services. Employers’ concerns, however, centered on the possible effects of parity on health care costs; nearly two-thirds indicated that they were very or somewhat concerned about the effects of parity on health care costs in the future.

Little evidence suggests the parity law had any significant effects on the Vermont insurance market. The survey indicated that Vermont employers did not drop their insurance coverage or self insure as a result of parity. Of the employers offering health insurance coverage as of January 1, 1998, the date the parity law went into effect, 0.3 percent (accounting for 0.07 percent of Vermont employees) reported dropping their coverage and cited parity as a main or important reason for that decision. About 4 percent of Vermont employers—which employed 8 percent of Vermont employees—switched one or more of their plans to a self-insured product since the implementation of parity. It is not possible, however, to attribute this trend to parity alone since employers were unable to report the role of parity rela-

tive to other factors. The survey further suggests that parity was not one of the primary cost drivers in recent health insurance premium increases. To the extent that employers were able to report on the factors influencing premium increases, evidence suggests that employers attributed utilization increases primarily to medical/surgical and pharmacy services, not MH/SA services.

Perhaps the most striking finding to emerge from this analysis is the limited knowledge among Vermont employers of the parity law in general and its effects in particular.¹⁰ About half of the fully insured employers in Vermont had not heard about parity; and even among those that had, respondents indicated that their level of understanding was relatively low. This is surprising, given the level of attention typically focused on parity issues among employer groups at the national and State levels. Nevertheless, evidence suggests that employers currently want to know more about parity—the majority of employers expressed dissatisfaction with the level of information available about the law. The most common recommendation made by employers was for increased education about the law.

¹⁰ On the other hand, it is possible that the level of knowledge about parity was understated among employers. The survey took place more than 18 months after the parity law went into effect; thus, it is possible that awareness was heightened during the period of early implementation—particularly when advocacy efforts led to increased public education and proactive response by BCBSVT to address transition problems.



Synthesis of Major Findings

Vermont implemented the Nation's most comprehensive parity law in 1998, extending full parity to both mental health and substance abuse (MH/SA) services. This study sought to determine how the implementation of parity affected major stakeholders: health plans, employers, providers, and consumers. The evaluation took a multifaceted approach—including an implementation case study, claims/encounter data analysis, and employer survey. Much of the analysis focused on the experiences of two health plans—Kaiser/Community Health Plan (Kaiser/CHP) and Blue Cross Blue Shield of Vermont (BCBSVT). Together, these plans covered nearly 80 percent of the privately insured population at the time parity was implemented.

Findings from this study reflect experiences during the first two to three years of parity in Vermont. It is possible that a longer study period might yield different results, especially as the effects of managed care transitions stabilize. This study also is limited to a single State, and the results may not be generalizable to other States in which the mix of providers or services differs.

A. Summary of Major Conclusions

1. Parity Did Not Cause Employers to Drop Coverage or Switch to Self-Insured Products

The survey of Vermont employers revealed that employers did not drop health insurance coverage in response to parity. Of the employers offering insurance coverage when parity went into effect (January 1, 1998), just 0.3 percent (accounting for 0.07 percent

of Vermont employees) reported dropping coverage because of parity. This result is consistent with evidence that, within the timeframe of this study, parity did not have a sizable effect on health plan spending for MH/SA services.

Similarly, there was no evidence that a significant number of employers chose to self-insure to avoid the parity mandate. Since the implementation of parity, about 4 percent of Vermont employers (accounting for about 8 percent of Vermont employees) switched one or more of their health plans to a self-insured product. However, only 3 percent of those who had switched reported parity as a factor. Nevertheless, even if parity was not the driving force in the decision to self-insure, fewer employees were covered by parity than might have been anticipated.

2. Access to Outpatient Mental Health Services Improved With Parity

The likelihood of obtaining mental health services rose between 18 and 24 percent in the two health plans as a result of parity. The average number of outpatient visits per user increased as well. Thus, parity improved access to and intensity of outpatient mental health services among many health plan members in Vermont. However, for BCBSVT members who received their MH/SA benefits through the carve-out, the use of managed care arrangements offset the effect of parity. For these members, both the odds of obtaining treatment and the average number of outpatient visits per user declined.

Access to inpatient or partial treatment fell sharply among Kaiser/CHP members. There was a 32 percent lower likelihood of obtaining inpatient or partial MH treatment following parity, as Kaiser/CHP attempted to target inpatient care more efficiently, increasing the use of step-down or diversion programs as an alternative to hospitalization.

3. Access to Substance Abuse Treatment Was More Limited After Parity

The likelihood of inpatient or partial substance abuse treatment was much lower after the implementation of parity—in Kaiser/CHP, 51 percent lower and in BCBSVT, 34 percent lower. At the same time, BCBSVT members experienced an increase in the duration of inpatient or partial treatment, but given the marked reduction in access to such treatment, this may have reflected the targeting of more intensive treatment to a higher-severity case mix. As a result of these changes in patterns of access and use, average SA spending per BCBSVT member per quarter was nearly halved after parity.

4. Spending for Covered MH/SA Services Declined After Parity

MH/SA spending fell by 8 to 18 percent after parity was implemented, despite lower consumer cost sharing and higher limits on use of MH/SA care. Spending includes two components: health plan payments and consumer out-of-pocket payments for deductibles, coinsurance, and copayments.

Health plan spending for MH/SA services rose slightly for BCBSVT, but spending appears to have declined for Kaiser/CHP. It is estimated that health plan spending rose by 4.4 percent for BCBSVT, equal to about 19 cents per member per month (\$2.32 per member per year). BCBSVT spending for MH/SA services accounted for 2.47 percent of total health plan spending after parity, up from 2.30 percent pre-parity. This 0.17 percentage point increase reflects a 0.26 point increase for MH services and a 0.09 point decrease for SA services. Health plan spending was estimated to decrease by nearly 9 percent for Kaiser/CHP.

5. Consumers Paid a Smaller Share of Total Spending for Covered MH/SA Treatment After Parity

In BCBSVT plans, consumer cost sharing fell sharply, from 27 percent to 16 percent of total spending for covered MH/SA services. The entire gain was on the mental health side where, pre-parity, consumers had paid 30 percent of the total and post-parity, they paid 17 percent. The consumer share for SA services held steady at about 13 percent, both pre- and post-parity. Consumers benefited from the reductions in cost sharing for mental health services as a result of parity, and this may account, at least in part, for the increased access to and intensity of outpatient mental health services following parity.

6. *Managed Care for MH/SA Services Was an Important Factor in Controlling Costs*

Both health plans relied on managed care to contain the costs of MH/SA services following the implementation of parity. The use of managed care made parity affordable by shifting the locus of decision making primarily from the demand side (based on consumer cost sharing and coverage limits) to the supply side (based on the use of provider networks and medical-necessity criteria).

Both health plans approved only a limited number of outpatient sessions at one time and required prior approval and concurrent review for inpatient or partial treatment. Before approving more sessions, both required providers to set treatment goals and document progress toward meeting those goals.

7. *Awareness of Parity Was Relatively Low Among Consumers*

The low level of consumer awareness about parity also may have affected the growth of MH/SA access, utilization, and spending. A strong consensus had emerged among stakeholders that communication and education efforts could have been better during the first year of implementation. Prior to passage of the parity law, stakeholders were not sufficiently aware of the importance of a well-defined education and communication effort for minimizing confusion and disruptions in service delivery, especially given the coverage changes made by BCBSVT. There was a sense that many consumers remain unaware of the law or their expanded MH/SA benefits.

B. Concluding Remarks

Vermont stakeholders identified two areas in which early implementation could have been improved. First, they recommended a proactive education campaign about parity—with clear designation of roles and responsibilities among the various stakeholders—to raise awareness about parity and avoid confusion. Such a campaign could have helped consumers and providers develop more realistic expectations about the effects of the law, particularly in an environment where the implementation of parity coincided with a shift to managed care for MH/SA services and where consumers and providers had little prior experience with managed care.

Second, they recommended proactive (rather than reactive) strategies to ensure smooth transitions of patient care when health plans shift to more tightly managed provider networks. For example, in response to initial disruptions of care, BCBSVT required that its carve-out plan expand the MH/SA provider network and authorize six visits to a non-network provider during the transition. Proactive efforts to ease managed care transitions may have minimized the confusion and disruptions that occurred.

By all accounts, parity in benefit design for MH/SA services has been achieved in Vermont. However, the increased use of managed care that accompanied implementation of parity has introduced new issues with service delivery. As a result, state officials and legislators have turned their attention to monitoring the performance of health plans in delivering MH/SA services.

VI. References

- Bachman, R. (1997). An actuarial analysis of comprehensive mental health and substance abuse parity and other options for improved coverages in the state of Vermont. Report for the Vermont Association for Mental Health, the Vermont Psychological Association, and the American Psychological Association, January 1997.
- BISHCA. (1999). Report of the department of banking, insurance, securities, and health care administration on mental health and substance abuse parity (Act 25) to the Vermont General Assembly. Montpelier, VT: Author.
- BISHCA. (2000). The Vermont division of health care administration 2000 Vermont Family Health Insurance Survey: Health insurance survey data tables. Available at <http://www.bishca.state.vt.us/HcaDiv/Data&Reports/SurveyVTFamilyHealth2000/DataTablesIndex.htm>. Accessed February 17, 2002.
- Buck, J., Teich, J. L., Umland, B., & Stein, M. (1999). Behavioral health benefits in employer-sponsored health plans, 1997. *Health Affairs*, 18(2), 67–78.
- Cromwell, J., Rosenbach, M., Pope, G., McConnell, A., & Beaven, M. (1994). The nation's health care bill: Who bears the burden? Report submitted to The Robert Wood Johnson Foundation.
- Waltham, MA: Center for Health Economics Research.
- EBRI. (2001). Employer-based health benefits: Trends and outlook. EBRI Issue Brief No. 233, Executive Summary. Washington, DC: Author.
- Families USA. (1998). Hit and miss: State managed care laws. Publication 98–104. Washington, DC: Author.
- Gabel, J., Levitt, L., Pickreign, J., Whitmore, H., Holve, E., Rowland, D., Dhont, K., & Hawkins, S. (2001). Job-based health insurance in 2001: Inflation hits double digits, managed care retreats. *Health Affairs*, 20(3), 180–186.
- Gentry, C. (1998, July 22). Economic focus: Vermont HMOs attract few members, many rules. *The Wall Street Journal*, p. NE1.
- Goldman, W., McCulloch, J., & Sturm, R. (1998). Costs and use of mental health services before and after managed care. *Health Affairs*, 17(2), 40–52.
- Hall, M. (2000). An evaluation of Vermont's reform law. *Journal of Health Politics, Policy and Law*, 25(1), 101–131.
- Health Resources and Services Administration. (2000). HRSA state health workforce profile: Vermont. Rockville, MD: Author.

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- Hill, S., Sing, M., & Smolking, S. (1998). Case studies of the impacts and implementation of parity for mental health and substance abuse insurance benefits. Report submitted to the Substance Abuse and Mental Health Services Administration. Washington, DC: Mathematica Policy Research, Inc.
- Jensen, G., Morrissey, M., Gaffney, S., & Liston, D. (1997). The new dominance of managed care: Insurance trends in the 1990s. *Health Affairs*, 16(1), 125–136.
- Kaiser Family Foundation and Health Research & Educational Trust. (2001). Employer health benefits 2001 annual survey. Menlo Park, CA, and Chicago: Author.
- Libertoff, K. (1999). Fighting for parity in an age of incremental health care reform: A battle against discrimination in the health care industry. Report for the Substance Abuse and Mental Health Services Administration. Montpelier, VT: Vermont Association for Mental Health.
- McGuire, T. (1981). *Financing psychotherapy: Costs, effects, and public policy*. Cambridge, MA: Ballinger Publishing Company.
- Merit Behavioral Care Corporation. (1997). *1997–1998 utilization management guidelines*. Maryland Heights, MO: Merit Behavioral Care.
- National Association of Manufacturers. (2001, Dec. 4.). NAM says mental health parity is one more health care cost employers and employees can ill-afford. [Press release.] Washington, DC: Author.
- National Conference of State Legislatures. (2001, Dec. 31). Mental health parity. Behavioral Health Brief. Washington, DC: NCSL Health Policy Tracking Service.
- National Federation of Independent Business. (2001, July 30). NFIB expresses concern about mental health mandates: Letter to Senator Edward Kennedy, Chairman of the Health, Education, Labor and Pensions Committee. Washington, DC: Author.
- Rosenbach, M., & Young, C. (1998). An evaluation design for the Vermont parity act. Final report submitted to the Substance Abuse and Mental Health Services Administration. Cambridge, MA: Mathematica Policy Research, Inc.
- SAS Institute Inc. (1999). *SAS/STAT User's Guide, Version 8*. Cary, NC: Author.
- Shah, B. V., Barnwell, B. G., & Bieler, G. S. (1997). *SUDAAN User's Manual, Release 7.5*. Research Triangle Park, NC: Research Triangle Institute.
- Sturm, R., Goldman, W., & McCulloch, J. (1998). Mental health and substance abuse parity: A case study of Ohio's state employee program. *Journal of Mental Health Policy and Economics*, 1, 129–134.
- U.S. Chamber of Commerce. (2000, May 18). U.S. Chamber urges Senate to let business provide mental health benefits free of mandates. Press release. Washington, DC: Author.

-
- U.S. General Accounting Office. (2000). Mental Health Parity Act: Despite new federal standards, mental health benefits remain limited. GAO-HEHS-00-95. Washington, DC: Author.
- Vermont State Legislature. (2000). Section 4089, Mental Illness. Available at <http://www.leg.state.vt.us/statutes/titles08/chap107.htm>. Accessed July 20, 2000.
- Zarkin, G., & Garfinkel, S. (1994). The relationship between employer health insurance characteristics and the provision of employee assistance programs. *Inquiry*, 31, 102-114.
- Zarkin, G., Garfinkel, S., Potter, F., & McNeill, J. (1995). Employment-based health insurance: implications of the sampling unit for policy analysis. *Inquiry*, 32, 310-319.

Appendix A: Vermont's Mental Health/ Substance Abuse Parity Law

NO. 25. AN ACT RELATING TO HEALTH INSURANCE FOR MENTAL HEALTH AND SUBSTANCE ABUSE DIS- ORDERS.

(H.57)

It is hereby enacted by the General Assembly
of the State of Vermont:

Sec. 1. 8 V.S.A. ~ 4089a(g) and (h) are added
to read:

(g) Members of the independent panel of
mental health care providers shall be com-
pensated as provided in 32 V.S.A. ~ 1010(b)
and (c).

(h) A review agent shall pay a license fee
for the year of registration and a renewal fee
for each year thereafter of \$200.00. In addi-
tion, a review agent shall pay any additional
expenses incurred by the commissioner to
examine and investigate an application or an
amendment to an application.

Sec. 2. 8 V.S.A. ~4089b is added to read:

~4089b. HEALTH INSURANCE COVER-
AGE; MENTAL HEALTH AND SUB-
STANCE ABUSE

(a) As used in this section,

(1) "Health insurance plan" means any
health insurance policy or health benefit plan
offered by a health insurer, as defined in 18
V.S.A. ~9402(7). Health insurance plan
includes any health benefit plan offered or

administered by the state, or any subdivision
or instrumentality of the state.

(2) "Mental health condition" means
any condition or disorder involving mental
illness or alcohol or substance abuse that
falls under any of the diagnostic categories
listed in the mental disorders section of the
international classification of disease, as peri-
odically revised.

(3) "Rate, term or condition" means
any lifetime or annual payment limits,
deductibles, copayments, coinsurance and
any other cost-sharing requirements, out-of-
pocket limits, visit limits and any other
financial component of health insurance cov-
erage that affects the insured.

(b) A health insurance plan shall provide
coverage for treatment of a mental health
condition and shall not establish any rate,
term or condition that places a greater finan-
cial burden on an insured for access to treat-
ment for a mental health condition than for
access to treatment for a physical health con-
dition. Any deductible or out-of-pocket lim-
its required under a health insurance plan
shall be comprehensive for coverage of both
mental health and physical health conditions.

(c) A health insurance plan that does not
otherwise provide for management of care
under the plan, or that does not provide for

the same degree of management of care for all health conditions, may provide coverage for treatment of mental health conditions through a managed care organization provided that the managed care organization is in compliance with the rules adopted by the commissioner that assure that the system for delivery of treatment for mental health conditions does not diminish or negate the purpose of this section. The rules adopted by the commissioner shall assure that timely and appropriate access to care is available; that the quantity, location and specialty distribution of health care providers is adequate and that administrative or clinical protocols do not serve to reduce access to medically necessary treatment for any insured.

(d) A health insurance plan shall be construed to be in compliance with this section if at least one choice for treatment of mental health conditions provided to the insured within the plan has rates, terms and conditions that place no greater financial burden on the insured than for access to treatment of physical conditions. The commissioner may disapprove any plan that the commissioner determines to be inconsistent with the purposes of this section.

(e) To be eligible for coverage under this section the service shall be rendered:

(1) For treatment of mental illness,

(A) by a licensed or certified mental health professional, or

(B) in a mental health facility qualified pursuant to rules adopted by the secretary of human services or in an institution, approved by the secretary of human services, that provides a program for the treatment of a mental health condition pursuant to a written plan. A nonprofit hospital or a medical service corporation may require a mental health facility or licensed or certified mental

health professional to enter into a contract as a condition of providing benefits.

(2) For treatment of alcohol or substance abuse,

(A) by a substance abuse counselor or other person approved by the secretary of human services based on rules adopted by the secretary that establish standards and criteria for determining eligibility under this subdivision, or

(B) in an institution, approved by the secretary of human services, that provides a program for the treatment of alcohol or substance dependency pursuant to a written plan.

Sec. 3. REPORT

On or before January 15, 1999, the Department of Banking, Insurance, Securities, and Health Care Administration shall report to the general assembly on the following:

(1) An estimate of the impact of this act on health insurance costs.

(2) Actions taken by the department to assure that health insurance plans are in compliance with this act and that quality and access to treatment for mental health conditions provided by the plans are not compromised by providing financial parity for such coverage.

(3) When a health insurance plan offers choices for treatment of mental health and substance abuse conditions as provided by 8 V.S.A. ~ 4089b(d), an analysis and comparison of those choices in regard to level of access, choice and financial burden.

(4) Identification of any segments of the population of Vermont that may be excluded from access to treatment for mental health and substance abuse conditions at the level provided by this act, including an estimate of the number of Vermonters excluded from

such access under health benefit plans offered or administered by employers who receive the majority of their annual revenues from contract, grants or other expenditures by state agencies.

Sec. 4. CONSTRUCTION; TRANSITIONAL PROVISIONS

(a) The provisions of this bill shall not be construed to:

(1) Limit the provision of specialized Medicaid covered services for individuals with mental health or substance disorders.

(2) Supersede the provisions of federal law, federal or state Medicaid policy or the terms and conditions imposed on any Medicaid waiver granted to the state with respect to the provision of services to individuals with mental health or substance abuse disorders.

(3) Affect any annual health insurance plan until its date of renewal or any health insurance plan governed by a collective bargaining agreement or employment contract until the expiration of that contract.

(b) The rules of the secretary of human services adopted under 8 V.S.A. ~4089, relat-

ing to eligibility for payment for treatment of mental illness, and adopted under 8 V.S.A. ~4099, relating to eligibility for payment for treatment of alcoholism, shall remain in effect until the effective date of this act and thereafter shall be deemed to be the rules adopted by the secretary under 8 V.S.A. ~4089b(e), to the extent that they are consistent with the provisions of this act and until amended or repealed by the secretary.

Sec. 5. REPEAL

8 V.S.A. ~4089 (mental illness) and ~4097–4099b (alcoholism) are repealed in regard to any health insurance plan only after the provisions of this act take effect in accordance with Sec. 6 of this act.

Sec. 6. EFFECTIVE DATE

This act shall take effect on passage and shall apply to any health insurance plan offered or renewed on and after January 1, 1998.

Approved: May 28, 1997

Source: VT State Legislature home page:
<http://www.leg.state.vt.us/docs/1998/acts/act025.htm>

Appendix B: The Context for Vermont's Parity Law

This appendix provides background information for the implementation case study presented in Chapter II. Section A discusses the legislative history and Section B describes the market and policy environment in Vermont. This information sets the context for the implementation of Vermont's parity law.

A. Legislative History

Prior to the enactment of the Vermont parity law in 1997, State law specified certain minimum requirements for health insurance coverage for mental health and alcoholism services. In 1976, the State required health plans licensed in Vermont to offer mental health benefits as an option for purchasers, including at least 45 days of annual inpatient coverage and \$500 of annual outpatient coverage. Outpatient visits were to be covered at 100 percent of costs for the first five visits, with at least 80 percent coverage thereafter. In 1986, the State mandated that alcoholism benefits include at least 5 days of detoxification services per occurrence, a lifetime minimum of 56 days of inpatient and partial institutional rehabilitation, and a lifetime minimum of 180 hours of outpatient rehabilitation. The alcoholism benefits were “subject to the durational limits, dollar limits, deductibles and coinsurance factors of the basic insurance policy or coverage” (Vermont State Legislature, 2000). Neither of these laws achieved parity between MH/SA and physical health benefits, nor did they require coverage of other drug abuse treatment.

Vermont's mental health and substance abuse (MH/SA) parity law—known as Act 25—was enacted in 1997, following passage of a less comprehensive Federal mental health parity law in 1996.¹ Enactment of Vermont's parity law was the result of the efforts of a broad coalition of Vermont stakeholders who sought to remove the remaining limits placed on MH/SA coverage, including separate outpatient visit or inpatient day limits and higher deductibles and coinsurance rates. The Vermont law also extended parity to substance abuse benefits. Led by the Vermont Association for Mental Health and other prominent provider and consumer advocacy organizations, the Vermont Parity Coalition successfully engaged the Vermont business and health plan communities in the reform debate, convincing them that the reform

¹ The 1996 Federal parity law applied only to health insurance sponsored by employers with more than 50 employees. It also only required that annual and lifetime dollar limits for mental health be equal to those for physical health coverage. The law did not eliminate disparities in deductibles, coinsurance, and visit or day limits for mental health services, nor did it cover substance abuse treatment (USGAO, 2000).

would not have substantially adverse impacts on overall health care costs or premiums (Libertoff, 1999).

The lack of significant anticipated effects on costs was an important factor in the decision by the business community not to strongly oppose passage of the law. An actuarial study conducted by Coopers and Lybrand in 1996 predicted that a comprehensive parity law in Vermont would have a small impact on overall premiums (ranging from an increase of 1 to 5 percent), particularly for benefits offered in managed care products (Bachman, 1997). Cognizant of the potential importance of managed care in limiting the cost impacts, health plan and business representatives successfully sought to ensure that the parity law would allow for the use of managed care in providing MH/SA services. In particular, Act 25 states:

A health insurance plan... may provide coverage for treatment of mental health conditions through a managed care organization provided that the managed care organization is in compliance with the rules adopted by the commissioner that assure that the system for delivery of treatment for mental health conditions does not diminish or negate the purpose of [the law].

B. Market and Policy Environment

Vermont's market for MH/SA services and its health care policy environment provided a unique context for the implementation of the parity law. Prior to the enactment of parity, MH/SA services were considered to be in higher demand and in greater supply than in most other parts of the United States. In addition, the health insurance market was highly consolidated, with two major health plans dominating the private insurance market. Because of the State's small size, leader-

ship and decisionmaking about MH/SA policies were guided by a relatively small number of actors who were generally well known to one another. These characteristics appear to have contributed to the passage of a comprehensive parity law; these characteristics also appear to have fostered an expeditious, coordinated response to initial implementation challenges.

1. Demand for and Supply of MH/SA Services

During the case study interviews, many stakeholders contended that, prior to parity, consumers in Vermont valued MH/SA counseling services and other therapies highly and used them more frequently than consumers in most States. Some felt that there was unnecessary use of services by the "worried well," while others argued that Vermont consumers were well educated about mental health issues and understood the importance of counseling and other services for improving or maintaining their mental health. For those with severe mental illness, however, stakeholders agreed that access was constrained by financial barriers because of discriminatory benefit limits for MH/SA services, as well as a remaining stigma associated with seeking treatment for MH/SA conditions.

In comparison to other States, Vermont has a relatively large number of MH/SA providers—including psychiatrists, psychologists, licensed social workers, and other types of MH/SA counselors or therapists who specialize in treating specific problems or diagnoses. In 1998, 116 psychiatrists, 360 psychologists, and 1,680 social workers were practicing in the State, ranking Vermont fourth among States in the number of psychiatrists, first in the number of psychologists, and tenth in the number of social workers,

on a per capita basis (HRSA, 2000). Vermont also has several prominent institutional providers of MH/SA services, including the Fletcher Allen hospital system, affiliated with the University of Vermont, and the Brattleboro Retreat.

Despite the relatively high overall supply and diversity of MH/SA providers, Vermont was perceived to have significant shortages in selected specialties, including child psychiatrists and specialized inpatient and outpatient programs to treat conditions common among children and adolescents. A number of interviewees said that the small, rural nature of the State presented unique challenges for recruiting certain types of MH/SA specialists.

A substantial portion of MH/SA services is provided through the county mental health system, especially for consumers without private health insurance coverage. These services are coordinated and sponsored by various State agencies, including the Department of Developmental and Mental Health Services and the Office of Alcohol and Drug Abuse Programs.

2. The Health Insurance Market

Like most States, Vermont has a highly consolidated insurance market. In 1998, about two-thirds of Vermont's population had private health insurance.² At that time, two major health plans dominated Vermont's private insurance market, accounting for about four-fifths of the privately insured, primarily through small and large employer group contracts (Table B.1). The larger of the two plans, Blue Cross Blue Shield of Vermont

² In 1998, about a quarter of the privately insured were covered by self-funded plans offered by employers or other purchasers not subject to Vermont's parity law (BISHCA, 1999).

Table B.1: Market Share of the Five Largest Health Plans in Vermont, 1998 and 2000

	<i>Percentage of Market Share^a</i>
Five Largest Health Plans in 1998	90
BCBSVT	46
Kaiser/CHP ^b	32
The Vermont Health Plan ^c	5
Cigna Health Care	4
Allianz Life Insurance	3
Five Largest Health Plans in 2000	96
BCBSVT	46
MVP Health Plan	26
The Vermont Health Plan ^c	13
Cigna Health Care	6
Allianz Life Insurance	5

Source: Vermont Annual State Supplement: Comprehensive Medical Line of Business, 1998 and 2000.

^a Market share is calculated based on total earned premiums for private health insurance plans in Vermont.

^b Kaiser/CHP exited the Northeast Region (including Vermont) as of March 2000.

^c The Vermont Health Plan is an HMO owned by BCBSVT.

BCBSVT = Blue Cross Blue Shield of Vermont.

(BCBSVT), primarily offered traditional indemnity health insurance coverage.³ The second largest plan, Kaiser/Community Health Plan (Kaiser/CHP), offered a health maintenance organization (HMO) product with services provided through a network of providers.

The rest of the private health insurance market consisted of a large number of health plans with much smaller market shares; no plan had more than 5 percent. A small portion of people who were privately insured in Vermont were covered through individual insurance policies, primarily offered by multistate carriers.

³ BCBSVT markets an HMO product through The Vermont Health Plan, an affiliated, licensed HMO.

3. *The State Health Policy Environment*

According to most stakeholders, Vermont has had an activist approach to health policy, inclined to pursue legislation to improve access to and quality of health care services for its residents. Consistent with this orientation, the State has taken a comprehensive approach to regulating managed care. Vermont regulates more areas of managed care than any other State in the Nation, despite the fact that most Vermont residents with private coverage historically have not enrolled in managed care plans (Families USA, 1998; Gentry, 1998). Rule 10, for example, mandated the filing of performance report cards for HMOs and established quality standards in such areas as utilization management, provider network adequacy, and preventive-service delivery. A separate regulation established a consumer appeals process with independent review of coverage denials for mental health services that occurred as a result of utilization review. In addition, reforms in 1992 and 1993 regulated insurance benefits in the small group and individual markets, including guaranteed issue of insurance coverage and community rating (Hall, 2000). The legislature has enacted a variety of benefit mandates, includ-

ing coverage of chiropractic services, contraceptive services, maternity length of stay, and mammography.

Although the State has taken an activist approach toward health policy reforms, most stakeholders do not perceive the State as being overly aggressive in enforcement. The Department of Banking, Insurance, Securities, and Health Care Administration (BISHCA) is charged with overseeing implementation of the parity law, as well as health care consumer protection laws. BISHCA views its role as monitoring health plans' compliance with relevant laws and ensuring that the processes mandated by consumer protection laws are in place to deal with access or quality problems. Unless major problems have been identified, the agency generally does not attempt to intervene in the daily operations of health plans, the clinical decisions of providers, or the negotiations or routine interactions between health plans and providers. To ensure overall compliance with the parity law, BISHCA requires insurers to submit rate and form filings that clearly indicate changes in MH/SA coverage and then tracks these filings for individual health plans (BISHCA, 1999).

Appendix C: Methods Used to Conduct the Claims/Encounter Data Analysis

This appendix presents an overview of the approach used to measure the effect of parity on the mental health and substance abuse (MH/SA) cost and utilization experience of two health plans: Kaiser/Community Health Plan (Kaiser/CHP) and Blue Cross Blue Shield of Vermont (BCBSVT). The first two sections describe the data sources and study sample, while the third section discusses the definition of MH/SA claims for analytic purposes. This appendix concludes with an overview of the approach used to conduct the descriptive and multivariate analyses.

A. Data Sources

Claims/encounter data were acquired for the two health plans for dates of service during the 4-year study period, 1996 through 1999 (2 years prior to parity and 2 years after initial implementation). In addition, each health plan provided a membership file, employer group file, and other supporting documentation to facilitate the claims analysis. The claims followed standard UB-92 and HCFA-1500 formats for inpatient and outpatient claims, respectively. Diagnoses were coded with ICD-9 codes, and most procedures were coded with CPT-4 codes. Member identification numbers were encrypted to preserve confidentiality, and no identifying information (such as name, address, or telephone number) was provided.

B. Study Sample

The analysis was restricted to those who were continuously enrolled in the health plan

during a given calendar year. The study group excluded those who were insured under Medicaid or Federal or State employee plan contracts because they were subject to different coverage provisions. Also excluded were members residing outside of Vermont and those over age 64 because their primary coverage was through Medicare.

The study group also was restricted according to plan or group type. For Kaiser/CHP, the analytic sample was limited to those with commercial group coverage because they dominated the Kaiser/CHP membership. In addition, the Kaiser/CHP analytic sample excluded members in self-insured groups because they were not subject to the Vermont parity law. In contrast, the BCBSVT sample included members in self-insured plans (known as “cost plus”); these groups were subject to the parity law because an insurance certificate was provided to each subscriber. BCBSVT members

enrolled in products that relied on managed care for MH/SA services prior to parity were excluded because their claims data were incomplete. The BCBSVT analysis, therefore, focused on the three products that shifted large shares of their members from indemnity to managed care for MH/SA services following the implementation of parity.

C. File Construction

A person-quarter utilization file was constructed for each health plan for a 4-year period (1996 through 1999). Considerable effort was devoted to identifying MH/SA claims using criteria defined by the two health plans. The goal was to follow—as closely as possible—the procedures used by each plan to adjudicate MH/SA claims and to accumulate the claims against the pre-parity benefit limits. Health plan officials assisted in developing plan-specific algorithms that could be applied to their respective claims databases. Each health plan used some plan-specific procedure codes for MH/SA services that were incorporated in the algorithms.

To identify inpatient MH/SA claims, both plans relied on revenue and diagnosis codes. In addition, Kaiser/CHP used admission type and procedure codes, while BCBSVT used provider type. Inpatient claims that met the plan-specific criteria were flagged and classified as mental health or substance abuse admissions, based on their primary diagnosis.

For outpatient facility and professional claims, a combination of procedure codes and revenue codes were used, as well as specialty provider type for BCBSVT and billing area for Kaiser/CHP. Partial hospitalization claims were flagged separately based on revenue codes. Both health plans counted two “days” of such treatment as equivalent to one day of inpatient treatment. Claims for

professional services were also differentiated according to whether they were provided in an inpatient setting: BCBSVT counted these services against the annual and lifetime dollar limit, whereas Kaiser/CHP excluded these services from the pre-parity visit limit. As with inpatient claims, all claims that met the selection criteria as mental health or substance abuse visits were classified according to their primary diagnosis.

Each type of use was quantified in terms of a dichotomous measure of no use/any use (0,1) and a continuous measure of the level of use (visits, days). For BCBSVT, spending was measured for each type of use in three ways: “total spending” was defined as the allowed charge, which included the health plan payment plus the member payment (that is, deductible, coinsurance, or copayment); “health plan payment” was defined as the actual payment by the health plan, net of member cost sharing; and “patient copayment” was defined as the member payment.

Reliable spending data were not available at the claim level for Kaiser/CHP because much of the care was provided in a staff-model HMO where providers were salaried or in a group-model HMO where providers were capitated. However, aggregate measures of MH/SA spending were imputed for Kaiser/CHP based on BCBSVT unit costs.

D. Approach to Descriptive and Multivariate Analysis

The descriptive analysis provided a snapshot of pre- versus post-parity levels of access, use, and spending. Analyses were conducted separately for mental health and substance abuse treatment. PROC DESCRIPT in SUDAAN was used to produce standardized measures, which controlled for age, gender, and subscriber status (Shah, Barnwell, &

Bieler, 1997). Frequency distributions of MH/SA utilization and spending were also produced over the 4-year period to track shifts in the level of annual use following implementation of parity. This approach enabled an assessment of the extent to which health plan members were receiving services that would have exceeded the pre-parity benefit limits. Analyses were conducted for all members, with separate analyses for those with serious mental conditions (major depression, bipolar disorder, or schizophrenia).

The multivariate analysis provided a more rigorous test of the effect of parity. PROC LOGISTIC was used to test the effect of parity on the probability of use, while PROC REG was used to examine the effect of parity on the level of use among those with any use (SAS Institute Inc., 1999). The multivariate analysis controlled for demographic characteristics, including age, gender, subscriber status, and county of residence (a proxy for such local factors as public and private provider supply). Due to the small number of observations in seven counties, adjacent counties were grouped—Caledonia/Essex/Orleans, Franklin/Grand Isle, and Windham/Windsor—similar to the catchment areas used for publicly funded services.

The volume-of-use analyses controlled for type of MH/SA diagnosis. The MH analyses included four diagnosis variables: major depression/bipolar disorder/schizophrenia, mild/moderate depression, adjustment reaction, and dual MH/SA diagnosis. The SA analyses included an indicator of dual MH/SA diagnosis but did not specify the type of MH diagnosis due to the limited number of observations.

The multivariate analysis included a “quarter counter,” ranging from 1 to 16, to control for secular trends independent of

parity. The BCBSVT analyses also controlled for the type of plan (Basic, Comp, or VFP) and whether MH/SA benefits were managed or unmanaged during the quarter.

The variable of primary interest was the parity indicator, which had a value of 1 in post-parity quarters and a value of 0 in pre-parity quarters. The coefficient estimates associated with this variable indicated the direction and magnitude of the effect of parity on access, use, and spending (controlling for individual characteristics, geographic location, and the secular trend). In addition to examining the sign and significance of the parity coefficient, odds ratios were obtained from the logistic regressions.¹ Predicted levels of use were also computed for selected dependent variables related to utilization and spending, where the parity coefficient was statistically significant. Selected results of the multivariate analysis were incorporated into the discussion of the descriptive analysis to highlight the independent effect of parity.

The complete results of the regression analyses are presented in this appendix. The determinants of mental health access and use are presented first, followed by the determinants of substance abuse treatment.

¹ The odds ratio shows the probability of obtaining treatment post-parity compared to pre-parity. An odds ratio of 1 indicates there was no difference in the probability of obtaining treatment before and after parity. An odds ratio greater than 1 indicates that the probability of obtaining treatment was higher after parity than before parity, while an odds ratio less than 1 indicates that the probability of obtaining treatment was lower after parity than before parity.

Table C.1: Determinants of the Probability of Mental Health Service Use: Kaiser/CHP, 1996–1999

	Any Mental Health Services		Inpatient/Partial MH		Outpatient MH	
	Coefficient (S.E.)	Odds Ratio	Coefficient (S.E.)	Odds Ratio	Coefficient (S.E.)	Odds Ratio
Intercept	–3.449*** (0.026)		–7.297*** (0.174)		–3.452*** (0.026)	
Age (40 and over omitted)						
18 and under	–0.161*** (0.023)	0.85	–0.281* (0.147)	0.76	–0.162*** (0.023)	0.85
19 to 29	–0.069** (0.028)	0.93	0.153 (0.176)	1.17	–0.069** (0.028)	0.93
30 to 39	0.237*** (0.020)	1.27	0.078 (0.142)	1.08	0.237*** (0.020)	1.27
Gender (Female omitted)						
Male	–0.487*** (0.016)	0.62	–0.570*** (0.113)	0.57	–0.487*** (0.016)	0.62
Subscriber Status (Dependent omitted)	0.023 (0.019)	1.02	–0.411*** (0.128)	0.66	0.023 (0.019)	1.02
County (Chittenden omitted)						
Addison	0.060* (0.034)	1.06	0.411* (0.212)	1.51	0.056* (0.034)	1.06
Bennington	0.237*** (0.028)	1.27	0.319* (0.193)	1.38	0.238*** (0.028)	1.27
Caledonia/Essex/Orleans	–0.343*** (0.077)	0.71	–0.802 (0.713)	0.45	–0.341*** (0.077)	0.71
Franklin/Grand Isle	–0.347*** (0.029)	0.71	–0.276 (0.203)	0.76	–0.346*** (0.029)	0.71
Lamoille	–0.217*** (0.043)	0.81	0.059 (0.273)	1.06	–0.217*** (0.043)	0.81
Orange	–0.099 (0.073)	0.91	0.025 (0.508)	1.03	–0.097 (0.073)	0.91
Rutland	0.096*** (0.029)	1.10	–0.312 (0.246)	0.73	0.096*** (0.029)	1.10
Washington	–0.337*** (0.038)	0.71	0.147 (0.227)	1.16	–0.334*** (0.038)	0.72

Table C.1 continued						
	Any Mental Health Services		Inpatient/Partial MH		Outpatient MH	
	Coefficient (S.E.)	Odds Ratio	Coefficient (S.E.)	Odds Ratio	Coefficient (S.E.)	Odds Ratio
Windham/Windsor Quarter	0.388*** (0.021) -0.012*** (0.003)	1.47 0.99	0.606*** (0.141) 0.029 (0.023) -0.380* (0.203)	1.83 1.03 0.68	0.386*** (0.021) -0.012*** (0.003) 0.160*** (0.029)	1.47 0.99 1.17
Parity (1 = yes)	0.162*** (0.029)	1.18				
Overall Chi-Square N	2,346.74*** 707,896		85.10*** 707,896		2,334.82*** 707,896	

Source: Original analysis of Kaiser/CHP claims/encounter data by Mathematica Policy Research, Inc.

*Significantly different from zero at the .10 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

***Significantly different from zero at the .01 level, two-tailed test.

S.E. = Standard error.

Table C.2: Determinants of the Probability of Mental Health Service Use: Blue Cross Blue Shield of Vermont, 1996–1999						
	Any Mental Health Services		Inpatient/Partial MH		Outpatient MH	
	Coefficient (S.E.)	Odds Ratio	Coefficient (S.E.)	Odds Ratio	Coefficient (S.E.)	Odds Ratio
Intercept	–2.620*** (0.022)		–8.049*** (0.242)		–2.621*** (0.022)	
Age (40 and over omitted)						
18 and under	–0.334*** (0.019)	0.72	–0.109 (0.179)	0.90	–0.334*** (0.019)	0.72
19 to 29	–0.347*** (0.024)	0.71	0.371* (0.203)	1.45	–0.346*** (0.024)	0.71
30 to 39	0.182*** (0.016)	1.20	0.121 (0.178)	1.13	0.182*** (0.016)	1.20
Gender (Female omitted)	–0.539*** (0.013)	0.58	–0.393*** (0.134)	0.68	–0.539*** (0.013)	0.58
Subscriber Status (Dependent omitted)	0.194*** (0.015)	1.22	–0.227 (0.153)	0.80	0.194*** (0.015)	1.22
County (Chittenden omitted)						
Addison	–0.336*** (0.027)	0.72	0.215 (0.290)	1.24	–0.336*** (0.027)	0.71
Bennington	–0.108*** (0.024)	0.90	0.149 (0.290)	1.16	–0.107*** (0.024)	0.90
Caledonia/Essex/Orleans	–0.931*** (0.025)	0.39	0.154 (0.237)	1.17	–0.932*** (0.025)	0.39
Franklin/Grand Isle	–0.712*** (0.032)	0.49	0.331 (0.284)	1.39	–0.712*** (0.032)	0.49
Lamoille	–0.512*** (0.033)	0.60	–0.498 (0.437)	0.61	–0.512*** (0.033)	0.60
Orange	–0.686*** (0.033)	0.50	–0.090 (0.342)	0.91	–0.685*** (0.033)	0.50
Rutland	–0.470*** (0.025)	0.63	–0.506 (0.329)	0.60	–0.469*** (0.025)	0.63

Table C.2 continued						
	Any Mental Health Services		Inpatient/Partial MH		Outpatient MH	
	Coefficient (S.E.)	Odds Ratio	Coefficient (S.E.)	Odds Ratio	Coefficient (S.E.)	Odds Ratio
Washington	-0.418*** (0.021)	0.66	0.310 (0.224)	1.36	-0.418*** (0.021)	0.66
Windham/Windsor	-0.190*** (0.019)	0.83	0.426** (0.21)	1.53	-0.190*** (0.019)	0.83
Line of Business (VFP omitted)						
Basic	0.129*** (0.017)	1.14	0.379** (0.169)	1.46	0.129*** (0.017)	1.14
Comp	0.249*** (0.014)	1.28	0.038 (0.157)	1.04	0.249*** (0.014)	1.28
Quarter	-0.003 (0.002)	1.00	0.009 (0.022)	1.01	-0.003 (0.002)	1.00
Managed Care for MH/SA (1 = yes)	-0.296*** (0.02)	0.74	0.006 (0.200)	1.01	-0.296*** (0.020)	0.74
Parity (1 = yes)	0.216*** (0.024)	1.24	0.296 (0.234)	1.35	0.216*** (0.024)	1.24
Overall Chi-Square N	6,045.13*** 656,735		49.76*** 656,735		6,044.57*** 656,735	

Source: Original analysis of Blue Cross Blue Shield of Vermont claims/encounter data by Mathematica Policy Research, Inc.

*Significantly different from zero at the .10 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

***Significantly different from zero at the .01 level, two-tailed test.

S.E. = Standard error.

**Table C.3: Determinants of the Level of Mental Health Service Use:
Kaiser/CHP, 1996–1999**

	<i>Log of Number of Outpatient Mental Health Visits per User</i>	<i>Log of Number of Inpatient/Partial Mental Health Days per User^a</i>
Intercept	0.582*** (0.022)	1.635*** (0.220)
Age (40 and over omitted)		
18 and under	0.098*** (0.017)	–0.154 (0.160)
19 to 29	0.040** (0.020)	0.095 (0.179)
30 to 39	–0.004 (0.014)	–0.101 (0.148)
Gender (Female omitted)	–0.005 (0.012)	0.189 (0.116)
Subscriber Status (Dependent omitted)	0.017 (0.013)	–0.037 (0.129)
County (Chittenden omitted)		
Addison	0.227*** (0.025)	–0.235 (0.216)
Bennington	–0.007 (0.020)	0.058 (0.196)
Caledonia/Essex/Orleans	0.419*** (0.056)	0.382 (0.723)
Franklin/Grand Isle	–0.022 (0.021)	0.011 (0.207)
Lamoille	0.212*** (0.031)	–0.398 (0.275)
Orange	0.142*** (0.053)	0.843 (0.527)
Rutland	0.040* (0.021)	0.481* (0.252)
Washington	0.109*** (0.028)	–0.303 (0.232)
Windham/Windsor	0.133*** (0.015)	0.121 (0.149)
Diagnosis		
Major Depression/ Bipolar Disorder/Schizophrenia	0.349*** (0.015)	0.384*** (0.130)
Mild/Moderate Depression	0.282*** (0.014)	0.156 (0.113)
Adjustment Reaction	0.232*** (0.013)	–0.089 (0.110)
Dual Diagnosis (MH/SA)	–0.083*** (0.032)	0.196 (0.141)

Table C.3 continued		
	<i>Log of Number of Outpatient Mental Health Visits per User</i>	<i>Log of Number of Inpatient/Partial Mental Health Days per User^a</i>
Quarter	−0.006*** (0.002)	−0.041* (0.024)
Parity (1 = yes)	0.140*** (0.021)	0.134 (0.192)
R-Square	0.067	0.100
F	63.9***	1.92***
N	17,954	365
Dependent Variable Mean	0.948	1.730

Source: Original analysis of Kaiser/CHP claims/encounter data by Mathematica Policy Research, Inc.

^a The dependent variable reflects an inpatient-day equivalence, where two days of “partial” treatment are counted as one day of inpatient treatment.

*Significantly different from zero at the .10 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

***Significantly different from zero at the .01 level, two-tailed test.

Table C.4: Determinants of the Level of Mental Health Service Use: Blue Cross Blue Shield of Vermont, 1996–1999

	<i>Log of Number of Outpatient Mental Health Visits per User</i>	<i>Log of Number of Inpatient/Partial Mental Health Days per User^a</i>
Intercept	1.175*** (0.021)	1.641*** (0.273)
Age (40 and over omitted)		
18 and under	0.045*** (0.016)	0.061 (0.178)
19 to 29	0.001 (0.020)	–0.258 (0.201)
30 to 39	0.073*** (0.013)	–0.028 (0.169)
Gender (Female omitted)	–0.033*** (0.011)	–0.059 (0.126)
Subscriber Status (Dependent omitted)	0.060*** (0.012)	–0.215 (0.146)
County (Chittenden omitted)		
Addison	0.032 (0.022)	0.665** (0.269)
Bennington	0.010 (0.020)	0.269 (0.268)
Caledonia/Essex/Orleans	–0.178*** (0.021)	0.282 (0.214)
Franklin/Grand Isle	–0.104*** (0.027)	0.217 (0.261)
Lamoille	–0.001 (0.027)	0.482 (0.397)
Orange	–0.093*** (0.028)	0.108 (0.318)
Rutland	–0.093*** (0.021)	–0.389 (0.300)
Washington	–0.032* (0.017)	0.215 (0.207)
Windham/Windsor	–0.021 (0.016)	0.288 (0.198)
Diagnosis		
Major Depression/ Bipolar Disorder/Schizophrenia	0.129*** (0.014)	0.305** (0.143)
Mild/Moderate Depression	0.227*** (0.013)	–0.063 (0.120)
Adjustment Reaction	0.173*** (0.012)	–0.155 (0.129)
Dual Diagnosis (MH/SA)	–0.013 (0.043)	0.110 (0.178)

Table C.4 continued		
	<i>Log of Number of Outpatient Mental Health Visits per User</i>	<i>Log of Number of Inpatient/Partial Mental Health Days per User^a</i>
Line of Business (VFP omitted)		
Basic	−0.040*** (0.014)	0.219 (0.162)
Comp	0.001 (0.012)	−0.024 (0.150)
Quarter	−0.006*** (0.002)	−0.017 (0.019)
Managed Care for MH/SA (1 = yes)	−0.156*** (0.017)	−0.177 (0.189)
Parity (1 = yes)	0.069*** (0.020)	0.204 (0.221)
R-Square	0.025	0.129
F	32.07***	1.48*
N	28,304	252
Dependent Variable	1.294	1.842

Source: Original analysis of Blue Cross Blue Shield of Vermont claims/encounter data by Mathematica Policy Research, Inc.

^a The dependent variable reflects an inpatient-day equivalence, where two days of “partial” treatment are counted as one day of inpatient treatment.

*Significantly different from zero at the .10 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

***Significantly different from zero at the .01 level, two-tailed test.

Table C.5: Determinants of the Probability of Substance Abuse Service Use: Kaiser/CHP, 1996–1999

	<i>Any Mental Health Services</i>		<i>Inpatient/Partial MH</i>		<i>Outpatient MH</i>	
	<i>Coefficient (S.E.)</i>	<i>Odds Ratio</i>	<i>Coefficient (S.E.)</i>	<i>Odds Ratio</i>	<i>Coefficient (S.E.)</i>	<i>Odds Ratio</i>
Intercept	–6.245*** (0.074)		–7.860*** (0.218)		–6.344*** (0.075)	
Age (40 and over omitted) 18 and under	–0.097 (0.067)	0.91	–0.835*** (0.196)	0.43	–0.064 (0.068)	0.94
19 to 29	0.414*** (0.066)	1.51	–0.583** (0.269)	0.56	0.440*** (0.066)	1.55
30 to 39	0.645*** (0.049)	1.91	0.140 (0.157)	1.15	0.659*** (0.049)	1.93
Gender (Female omitted)	0.803*** (0.043)	2.23	0.880*** (0.142)	2.41	0.792*** (0.044)	2.21
Subscriber Status (Dependent omitted)	0.219*** (0.051)	1.24	–0.373** (0.154)	0.69	0.243*** (0.052)	1.28
County (Chittenden omitted) Addison	–0.446*** (0.108)	0.64	–0.740* (0.390)	0.48	–0.388*** (0.109)	0.68
Bennington	0.681*** (0.060)	1.98	–0.311 (0.276)	0.73	0.768*** (0.059)	2.16
Caledonia/Essex/Orleans	–0.600*** (0.226)	0.55	–1.233 (1.005)	0.29	–0.507** (0.226)	0.60
Franklin/Grand Isle	–0.182*** (0.068)	0.83	–0.492** (0.244)	0.61	–0.098 (0.068)	0.91
Lamoille	–0.451*** (0.121)	0.64	–0.85* (0.458)	0.43	–0.373*** (0.121)	0.69
Orange	–0.076 (0.189)	0.93	–0.452 (0.714)	0.64	–0.055 (0.195)	0.95
Rutland	0.273*** (0.068)	1.31	0.030 (0.235)	1.03	0.347*** (0.068)	1.41
Washington	–0.624*** (0.112)	0.54	–0.822** (0.391)	0.44	–0.108 (0.075)	0.90

Table C.5 continued						
	Any Mental Health Services		Inpatient/Partial MH		Outpatient MH	
	Coefficient (S.E.)	Odds Ratio	Coefficient (S.E.)	Odds Ratio	Coefficient (S.E.)	Odds Ratio
Windham/Windsor	−0.144** (0.065)	0.87	0.443*** (0.164)	1.56	−0.122 (0.134)	0.89
Quarter	−0.013 (0.009)	0.99	0.016 (0.028)	1.02	−0.017* (0.009)	0.98
Parity (1 = yes)	−0.043 (0.076)	0.96	−0.709*** (0.253)	0.49	−0.008 (0.077)	0.99
Overall Chi-Square N	1,023.77*** 707,896		116.00*** 707,896		977.17*** 707,896	

Source: Original analysis of Kaiser/CHP claims/encounter data by Mathematica Policy Research, Inc.

*Significantly different from zero at the .10 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

***Significantly different from zero at the .01 level, two-tailed test.

S.E. = Standard error.

Table C.6: Determinants of the Probability of Substance Abuse Service Use: Blue Cross Blue Shield of Vermont, 1996–1999

	<i>Any Mental Health Services</i>		<i>Inpatient/Partial MH</i>		<i>Outpatient MH</i>	
	<i>Coefficient (S.E.)</i>	<i>Odds Ratio</i>	<i>Coefficient (S.E.)</i>	<i>Odds Ratio</i>	<i>Coefficient (S.E.)</i>	<i>Odds Ratio</i>
Intercept	–6.714 (0.089)		–8.000*** (0.255)		–6.757*** (0.091)	
Age (40 and over omitted)						
18 and under	–0.054*** (0.077)	0.95	–0.178 (0.213)	0.84	–0.062 (0.079)	0.94
19 to 29	0.636*** (0.069)	1.89	0.526*** (0.203)	1.69	0.628*** (0.071)	1.87
30 to 39	0.728*** (0.054)	2.07	0.351** (0.172)	1.42	0.735*** (0.054)	2.09
Gender (Female omitted)	1.012*** (0.051)	2.75	0.883*** (0.15)	2.42	1.017*** (0.052)	2.77
Subscriber Status (Dependent omitted)	0.343*** (0.058)	1.41	0.064 (0.168)	1.07	0.347*** (0.059)	1.42
County (Chittenden omitted)						
Addison	–0.331*** (0.108)	0.72	–0.767** (0.361)	0.46	–0.314*** (0.110)	0.73
Bennington	0.119 (0.091)	1.13	–0.605* (0.345)	0.55	0.154* (0.092)	1.17
Caledonia/Essex/Orleans	–0.066 (0.077)	0.94	–0.826*** (0.278)	0.44	–0.032 (0.078)	0.97
Franklin/Grand Isle	–0.309*** (0.110)	0.73	–0.813** (0.379)	0.44	–0.275** (0.110)	0.76
Lamoille	–0.467*** (0.131)	0.63	–0.489 (0.378)	0.61	–0.455*** (0.133)	0.63
Orange	–0.366*** (0.117)	0.69	–1.015*** (0.432)	0.36	–0.360*** (0.120)	0.70
Rutland	–0.173* (0.089)	0.84	0.026 (0.236)	1.03	–0.184** (0.091)	0.83

Table C.6 continued

	Any Mental Health Services		Inpatient/Partial MH		Outpatient MH	
	Coefficient (S.E.)	Odds Ratio	Coefficient (S.E.)	Odds Ratio	Coefficient (S.E.)	Odds Ratio
Washington	-0.097 (0.076)	0.91	0.199 (0.199)	1.22	-0.125 (0.078)	0.88
Windham/Windsor	-0.093 (0.073)	0.91	-0.255 (0.218)	0.78	-0.077 (0.074)	0.93
Line of Business (VFP omitted)						
Basic	0.163*** (0.061)	1.18	0.242 (0.184)	1.27	0.170*** (0.062)	1.19
Comp	0.084 (0.053)	1.09	0.406*** (0.156)	1.50	0.073 (0.054)	1.08
Quarter	0.006 (0.008)	1.01	0.057** (0.022)	1.06	0.005 (0.008)	1.01
Managed Care for MH/SA	-0.207*** (0.077)	0.81	-0.107 (0.227)	0.90	-0.223*** (0.078)	0.80
Parity	-0.019 (0.085)	0.98	-0.413* (0.246)	0.66	-0.011 (0.086)	0.99
(1 = yes)						
Overall Chi-Square	960.70*** 656,735		109.24*** 656,735		942.68*** 656,735	
N						

Source: Original analysis of Blue Cross Blue Shield of Vermont claims/encounter data by Mathematica Policy Research, Inc.

*Significantly different from zero at the .10 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

***Significantly different from zero at the .01 level, two-tailed test.

S.E. = Standard error.

**Table C.7: Determinants of the Level of Substance Abuse Service Use:
Kaiser/CHP, 1996–1999**

	<i>Log of Number of Outpatient Substance Abuse Visits per User</i>	<i>Log of Number of Inpatient/Partial Substance Abuse Days per User^a</i>
Intercept	1.075*** (0.066)	2.225*** (0.180)
Age (40 and over omitted)		
18 and under	–0.296*** (0.059)	0.216 (0.174)
19 to 29	–0.155*** (0.058)	–0.056 (0.227)
30 to 39	0.014 (0.043)	–0.137 (0.136)
Gender (Female omitted)	0.014 (0.038)	–0.200* (0.120)
Subscriber Status (Dependent omitted)	0.007 (0.045)	–0.276** (0.130)
County (Chittenden omitted)		
Addison	0.127 (0.095)	–0.413 (0.326)
Bennington	0.066 (0.052)	0.337 (0.237)
Caledonia/Essex/Orleans	–0.014 (0.197)	1.398* (0.840)
Franklin/Grand Isle	0.001 (0.060)	0.029 (0.211)
Lamoille	0.237** (0.105)	0.269 (0.381)
Orange	0.084 (0.170)	–0.005 (0.594)
Rutland	0.063 (0.059)	0.680*** (0.197)
Washington	–0.207** (0.098)	–0.537 (0.336)
Windham/Windsor	0.042 (0.058)	0.276** (0.140)
Dual Diagnosis (MH/SA)	–1.101*** (0.071)	–0.327 (0.348)
Quarter	0.013* (0.008)	–0.046* (0.026)
Parity (1 = yes)	–0.032 (0.067)	0.032 (0.227)

Table C.7 continued		
	<i>Log of Number of Outpatient Substance Abuse Visits per User</i>	<i>Log of Number of Inpatient/Partial Substance Abuse Days per User^a</i>
R-Square	0.116	0.193
F	19.42***	3.17***
N	2,545	242
Dependent Variable Mean	0.140	1.784

Source: Original analysis of Kaiser/CHP claims/encounter data by Mathematica Policy Research, Inc.

^a The dependent variable reflects an inpatient-day equivalence, where two "partial" days of treatment are counted as one day of inpatient treatment.

*Significantly different from zero at the .10 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

***Significantly different from zero at the .01 level, two-tailed test.

MH/SA = mental health/substance abuse.

**Table C.8: Determinants of the Level of Substance Abuse Service Use:
Blue Cross Blue Shield of Vermont, 1996–1999**

	<i>Log of Number of Outpatient Substance Abuse Visits per User</i>	<i>Log of Number of Inpatient/Partial Substance Abuse Days per User^a</i>
Intercept	1.346*** (0.081)	2.073*** (0.264)
Age (40 and over omitted)		
18 and under	−0.190*** (0.069)	−0.115 (0.211)
19 to 29	−0.131** (0.062)	−0.196 (0.202)
30 to 39	−0.032 (0.047)	−0.195 (0.171)
Gender (Female omitted)	−0.106** (0.047)	0.007 (0.147)
Subscriber Status (Dependent omitted)	0.064 (0.051)	−0.088 (0.168)
County (Chittenden omitted)		
Addison	0.174* (0.096)	0.063 (0.352)
Bennington	−0.009 (0.08)	0.184 (0.346)
Caledonia/Essex/Orleans	−0.008 (0.067)	0.167 (0.264)
Franklin/Grand Isle	−0.175* (0.096)	0.296 (0.371)
Lamoille	0.280** (0.116)	−0.011 (0.367)
Orange	−0.007 (0.104)	0.894** (0.424)
Rutland	0.060 (0.079)	0.221 (0.231)
Washington	−0.237*** (0.067)	−0.243 (0.191)
Windham/Windsor	0.059 (0.064)	0.303 (0.212)
Dual Diagnosis (MH/SA)	−0.027 (0.048)	−0.196 (0.137)
Line of Business (VFP omitted)		
Basic	−0.003 (0.054)	0.113 (0.189)
Comp	0.075 (0.048)	0.128 (0.154)

Table C.8 continued		
	<i>Log of Number of Outpatient Substance Abuse Visits per User</i>	<i>Log of Number of Inpatient/Partial Substance Abuse Days per User^a</i>
Quarter	0.009 (0.007)	-0.037* (0.021)
Managed Care for MH/SA (1 = yes)	-0.193*** (0.068)	0.057 (0.225)
Parity (1 = yes)	-0.135* (0.075)	0.617*** (0.237)
R-Square	0.047	0.135
F	4.93***	1.65**
N	2,009	232
Dependent Variable Mean	1.229	1.913

Source: Original analysis of Blue Cross Blue Shield of Vermont claims/encounter data by Mathematica Policy Research, Inc.

^aThe dependent variable reflects an inpatient-day equivalence, where two "partial" days of treatment are counted as one day of inpatient treatment

*Significantly different from zero at the .10 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

***Significantly different from zero at the .01 level, two-tailed test.

MH/SA = mental health/substance abuse; VFP = Vermont Freedom Plan.

Table C.9: Determinants of Average Health Plan Payments for Mental Health and Substance Abuse Services per User per Quarter: Blue Cross Blue Shield of Vermont, 1996–1999

	<i>Log of Health Plan Payments per Mental Health Service User</i>	<i>Log of Health Plan Payments per Substance Abuse Service User</i>
Intercept	4.918*** (0.028)	5.678*** (0.114)
Age (40 and over omitted)		
18 and under	0.065*** (0.022)	–0.277*** (0.096)
19 to 29	0.034 (0.027)	–0.132 (0.087)
30 to 39	0.071*** (0.017)	–0.144** (0.066)
Gender (Female omitted)	–0.022 (0.015)	–0.139** (0.066)
Subscriber Status (Dependent omitted)	0.046***	–0.096
County (Chittenden omitted)		
Addison	0.058* (0.030)	0.101 (0.137)
Bennington	0.024 (0.027)	–0.263** (0.112)
Caledonia/Essex/Orleans	–0.213*** (0.028)	–0.171* (0.095)
Franklin/Grand Isle	–0.113*** (0.035)	–0.246* (0.137)
Lamoille	–0.004 (0.037)	0.152 (0.168)
Orange	–0.165*** (0.037)	–0.239* (0.144)
Rutland	–0.095*** (0.028)	0.065 (0.111)
Washington	–0.011 (0.023)	–0.218** (0.093)
Windham/Windsor	–0.058*** (0.021)	0.015 (0.090)
Diagnosis		
Major Depression/ Bipolar Disorder/Schizophrenia	0.251*** (0.019)	—
Mild/Moderate Depression	0.300*** (0.017)	—
Adjustment Reaction	0.262*** (0.016)	—
Dual Diagnosis (MH/SA)	0.245*** (0.056)	0.323*** (0.065)

Table C.9 continued		
	<i>Log of Health Plan Payments per Mental Health Service User</i>	<i>Log of Health Plan Payments per Substance Abuse Service User</i>
Line of Business (VFP Omitted)		
Basic	0.140*** (0.019)	0.136* (0.075)
Comp	0.213*** (0.016)	0.178*** (0.068)
Quarter	0.002 (0.003)	0.018* (0.009)
Managed Care for MH/SA (1 = yes)	-0.350*** (0.022)	-0.275*** (0.094)
Parity (1 = yes)	0.171*** (0.026)	-0.202** (0.103)
R-Square	0.043	0.056
F	51.15 ***	5.720 ***
N	26,055	1,944
Dependent Variable Mean	5.289	5.495

Source: Original analysis of Blue Cross Blue Shield of Vermont claims/encounter data by Mathematica Policy Research, Inc.

*Significantly different from zero at the .10 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

***Significantly different from zero at the .01 level, two-tailed test.

MH/SA = mental health/substance abuse; VFP = Vermont Freedom Plan.

Appendix D: Methods Used to Conduct the Survey of Vermont Employers

This appendix describes the methods used to conduct the Survey of Vermont Employers, including the sample design, data collection procedures, and analytic approach. This appendix also presents background information on the characteristics of Vermont employers and the attributes of employer-sponsored health insurance coverage in Vermont.

A. Sample Design

The sample for the Survey of Vermont Employers was drawn from the Unemployment Insurance (UI) File maintained by the Vermont Department of Employment and Training (DET). The file contains all employers who paid unemployment taxes in Vermont. Since businesses are mandated to report unemployment taxes annually, the UI file provided an up-to-date sample frame. The target population for the survey was businesses currently in operation in Vermont, excluding (1) those that had, on average, fewer than five employees across establishments in calendar year 1999; (2) those not in business before January 1, 1998 (when the parity law was enacted); and (3) Federal and State government entities.

Employer surveys can be conducted at the enterprise or establishment level, and the sampling unit may depend on the objectives of the survey (Zarkin et al., 1995).¹ Because most insurance decisions typically are made at the level of the enterprise, the sampling

unit for the Vermont employer survey was defined as the “Vermont portion of the business enterprise.” The DET sampling frame was used to identify those Vermont establishments associated with each enterprise operating in Vermont as of December 31, 1999.

The sample was selected using a stratified, simple random sample without replacement of businesses in Vermont enterprises. The records were divided into three strata: small (5 to 25 employees), medium (26 to 50 employees), and large (more than 50 employees). Each stratum was then divided

¹ An “enterprise” is the unit representing the entire corporation, including all divisions, subsidiaries, and branches. An “establishment” is the physical location of a single business, which typically produces a single good or provides a single service. An enterprise may consist of multiple or single establishments. According to Zarkin et al. (1995), “Because multi-establishment enterprises generally make health insurance decisions for the enterprise as a whole rather than for individual establishments, enterprise surveys are the most appropriate source of data for information on the factors affecting the decision to provide health insurance coverage and the rationale for designing health plans.”

into seven substrata: six substrata were formed based on three Standard Industrial Classification (SIC) codes (retail trade, services, and other) and two locations (Chittenden County and other counties), and a seventh substratum that included all local government entities. Thus, 21 substrata were defined for the study.

A total of 1,311 records originally were designated and separated into three waves. The goal was to complete 200 interviews with insured businesses in each of the three size strata (uninsured businesses would naturally distribute themselves across the strata as a result of screening for insurance status). The eligibility rate was projected at 85 percent and the response rate at 80 percent. However, after fielding two waves, the eligibility rate was much higher than expected (97.5 percent) and, as a result, the size of the third wave was reduced, such that a total of 1,040 records actually were released for interview: 421 in stratum 1 (small), 326 in stratum 2 (medium), and 293 in stratum 3 (large).

Altogether, 806 employers completed the survey (674 insured and 132 uninsured), and the overall response rate was 80.7 percent.

Across the three size strata, the number of completed cases and response rates are shown in Table D.1.

B. Data Collection Procedures

Interviews were conducted using computer-assisted telephone interviewing (CATI). Prior to conducting the interview, pre-field locating was performed to confirm that the sampled businesses were still in operation in Vermont, to verify that sampled businesses were at the enterprise level, and to identify the appropriate respondent for the survey (defined as the head of Vermont operations). Contact information was verified, and an advance letter and information packet were mailed to each employer prior to the CATI interview. In addition, the survey was publicized to Vermont employers through stories in local newspapers and trade magazines and through an informational Web site.

The questionnaire included the following topics: (1) employer eligibility for the survey, including health insurance status (insured, uninsured); (2) eligibility for and participation in employer health plans; (3) characteristics of health insurance coverage; (4) costs of health insurance coverage; (5) awareness of

Table D.1: Completed Cases and Response Rates

<i>Type of Enterprise</i>	<i>Small (5 to 25)</i>	<i>Medium (26 to 50)</i>	<i>Large (More Than 50)</i>	<i>Total</i>
Insured				
Estimated completes	200	200	200	600
Actual completes	221	225	228	674
Uninsured				
Estimated completes	96	20	5	121
Actual completes	106	21	5	132
Total				
Estimated completes	296	220	225	741
Actual completes	327	246	233	806
Response rate (percent)	81.5	78.5	82.1	80.7

Table D.2: Unweighted and Weighted Sample Sizes, by Stratum				
<i>Stratum</i>	<i>Unweighted Frequency</i>		<i>Weighted Frequency</i>	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
Total	806	100.0	6,700	100.0
Small (5 to 25)	327	40.6	5,172	77.2
Medium (26 to 50)	246	30.5	815	12.2
Large (More than 50)	233	28.9	713	10.7

the parity law; (6) effects of the parity law; (7) satisfaction with parity; (8) concerns and recommendations about parity; and (9) firm characteristics. Once an employer had been determined eligible for the survey, the interviewer identified the respondent who was most familiar with the Vermont parity law to conduct the remainder of the interview.

Uninsured businesses completed two sections of the instrument—the eligibility screener and firm characteristics. In addition, a brief set of questions was administered to newly uninsured businesses (uninsured since January 1, 1998) to determine the role of the MH/SA parity law in their decision to discontinue coverage.

Quality control was performed throughout the data collection process, including the use of supervisors and interviewers with experience on surveys of professionals; a one-day training session, including general instruction on data collection procedures and survey-specific training on the instrument and the project; consistency checks within the CATI system; random monitoring by the project director, survey director, and survey supervisor; and automated editing for skip patterns following completion of the survey.

C. Analytic Approach

Weights were developed for analysis, to adjust for the disproportionate probability of

selection by size of employer. Medium and large businesses were oversampled, while small businesses were undersampled. Table D.2 shows the unweighted and weighted distributions of responding businesses across the three strata.

To account for the complex sample design, SUDAAN software was used to compute the standard errors for significance testing. Two types of significance tests were performed: a *t*-test for continuous variables and chi-square test for categorical variables. Unless otherwise specified, all reported differences are significant at the .10 level or higher.

Most analyses compared employer perceptions of, and responses to, parity by the size of the firm. A measure of firm size was created based on the number of permanent full-time and part-time Vermont employees, as of December 31, 1999, as reported in the survey. Four size categories were analyzed: fewer than 10 (very small), 10 to 25 (small), 26 to 50 (medium), and more than 50 (large). Thus, for the purpose of this analysis, we divided the stratum containing 25 or fewer employees into two analytic categories because of the differences in characteristics and responses of the small and very small businesses.

Most analyses are performed at the employer level to ascertain differences in employer attitudes and responses to parity.

In addition, some analyses are presented at the employee level; that is, they are weighted by the number of employees in the firm. These analyses estimate the proportion of Vermont employees affected by various changes in employer-sponsored health insurance coverage (such as the percent affected by the discontinuation of coverage or by the shift to self-insured coverage).

D. Background Information on the Characteristics of Vermont Employers

Because the analysis in Chapter IV focuses on variations in employer perspectives on parity according to firm size, this appendix provides background information on the characteristics of Vermont businesses by firm size. The definition of “large business” used in this survey—more than 50 employees—is different from that used in many other surveys.² This analysis focused on businesses with more than 50 employees, as distinct from those with 50 or fewer, for two reasons. First, the Federal mental health parity law (along with many State laws) exempts businesses with 50 or fewer employees from compliance. Second, Vermont’s small business market is subject to different rating requirements than companies with more than 50 employees. Moreover, there is substantial evidence that virtually all businesses with more than 50 employees offer coverage, but there is considerable heterogeneity among smaller firms (KFF/HRET, 2001).

As shown in Table D.3, significant differences existed in the characteristics of businesses in Vermont along all dimensions other than urban/rural location. The vast majority (83 percent) of Vermont employers represented in the survey were for-profit enter-

prises; another 10 percent were not-for-profit, and the remaining 7 percent were local government entities (such as school districts). Businesses with 25 employees or fewer were more likely to be for-profit enterprises, whereas firms with more than 25 employees included a disproportionate representation of not-for-profit and publicly owned businesses.

Among the nongovernmental firms, more than one-third (37 percent) were associated with service industries, while about one-fourth (26 percent) were involved in retail trade. In general, businesses with 50 or fewer employees were more likely to specialize in retail trade, agriculture/forestry/fishing/mining, construction, and wholesale trade, while large businesses (more than 50 employees) were more likely to concentrate on manufacturing and services.

About 93 percent of businesses were headquartered in Vermont, though the likelihood of having a headquarters outside Vermont increased with size—18 percent of firms with more than 50 employees had their center of operations in another State or even outside the United States. Large businesses also were more likely to have a union presence—23 percent of those with more than 50 employees, versus 2 percent of those with fewer than 10 employees, employed staff with collective bargaining agreements.

The vast majority of Vermont firms had been in operation for more than 5 years, including 46 percent for 5 to 20 years and 45 percent for more than 20 years. A higher share of the large firms (79 percent) than small firms had been in business for more than 20 years. In general, the self-reported financial status was stronger in medium and large firms than in small or very small firms—21 to 26 percent of firms with 25 or fewer employees reported that they were in

² The KFF/HRET survey, for example, defines large firms as those with more than 200 workers.

Table D.3: Characteristics of Vermont Employers, by Firm Size					
	<i>All Firms</i>	<i>Number of Employees</i>			
		<i>Fewer Than 10</i>	<i>10 to 25</i>	<i>26 to 50</i>	<i>More Than 50</i>
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Ownership (chi-sq = 49.96*)					
For-profit	83.0	86.0	88.2	73.6	65.2
Not-for-profit	9.6	7.7	7.7	14.1	18.7
Local government	7.4	6.4	4.2	12.3	16.1
Type of industry (chi-sq = 51.33*) ^a					
Agriculture, forestry, fishing, mining, construction, wholesale trade	17.6	19.2	18.9	16.9	8.3
Manufacturing	11.3	7.5	12.1	12.3	22.4
Transportation, communication, utilities	4.2	4.0	3.6	5.3	5.4
Retail trade	26.1	28.3	25.4	27.4	18.3
Finance, insurance, real estate	3.4	4.4	2.3	2.0	4.2
Services	37.4	36.6	37.6	36.1	41.5
Location of headquarters (chi-sq = 30.12*)					
Vermont	92.9	94.6	95.6	88.0	82.5
Outside Vermont	7.1	5.4	4.4	12.0	17.6
Unionization (chi-sq = 87.94*)					
Any unionization	6.7	1.8	5.3	14.1	23.0
No unionization	93.3	98.2	94.7	85.9	77.0
Years of operation (chi-sq = 117.58*)					
2–5	9.4	8.3	13.9	6.6	2.7
6–20	45.5	50.3	50.1	39.8	17.9
More than 20	45.2	41.3	36.0	53.7	79.4
Self-reported financial status (chi-sq = 31.76*)					
Excellent	31.1	24.6	32.3	46.5	38.5
Good	48.0	49.8	47.1	44.2	46.9
Fair or poor	21.0	25.6	20.6	9.3	14.7
Location (chi-sq = 0.34)					
Urban	34.1	33.0	35.8	34.0	33.7
Rural	65.9	67.0	64.2	66.0	66.3

Source: Mathematica Policy Research Survey of Vermont Employers to Assess the Impact of the Vermont Parity Act.

Note: The survey includes Vermont businesses that were in operation as of January 1, 1998 and that remained in operation as of the time of the survey (Fall 2000). The survey excluded those that had, on average, fewer than five employees across establishments in calendar year 1999 and businesses operated by Federal and State government entities.

^a Excludes businesses operated by local governments.

* Distribution by firm size significantly different than what would be expected by chance alone, based on a chi-square test ($p < .01$).

fair or poor financial status, compared to 9 to 15 percent of firms with more than 25 employees. Finally, two-thirds of Vermont businesses were located in rural areas (outside Chittenden County), and there were no significant differences in the geographic distribution by firm size.

E. Characteristics of Employer-Sponsored Health Insurance Coverage in Vermont

This section provides background information to set the context for the discussion of the effects of parity on employers, including the rates and characteristics of employer offers of insurance coverage and employee participation; the number and types of health plan choices offered by employers; and the extent of employer monitoring of health care costs.

1. Employer Offers of Insurance Coverage

As shown in Table D.4, three out of four Vermont employers offered employer-sponsored insurance (ESI) coverage to their employees at the time the survey was conducted. The likelihood of offering coverage increased significantly with employer size, ranging from 62 percent of employers with fewer than 10 employees in Vermont to 97 percent among those with more than 50 Vermont employees. Virtually all firms—91 percent—that offered coverage to employees also offered coverage to their dependents. However, firms with 25 employees or fewer were less likely to offer dependent coverage than firms with more than 25 employees.

Firms offering ESI may restrict coverage based on the number of hours worked. Overall, about one-third of Vermont businesses offered coverage to part-time employees. Large firms (53 percent) were more like-

ly to offer coverage to part-time workers than smaller firms (25 to 40 percent).

Firms may require a minimum length of employment prior to offering coverage to employees. About two-thirds of Vermont employers had a waiting period for eligibility, although the rate was slightly higher among employers with more than 25 employees. Only one-fourth of Vermont employers had a waiting period for preexisting conditions (PEC); employers with more than 25 employees were at least twice as likely as smaller businesses to have a PEC clause.

2. Employee Participation

In addition to finding considerable variation among firms in whether they offered coverage—and to whom they offered coverage—there was significant variation in the participation rate among eligible workers (Table D.4). Across all firms that offered coverage, the participation rate among eligible workers was about 72 percent. In other words, nearly three-fourths of workers who were eligible to participate in ESI actually obtained coverage. The participation rate was higher among eligible employees in businesses with more than 50 employees (78 percent) than among employees in small or very small businesses (70 to 72 percent). In part, this may reflect the tendency of employees in small businesses to obtain coverage through a spouse or partner who is employed by a larger firm (Cromwell et al., 1994).

The Vermont Family Health Insurance Survey provides insights into why some workers may decline coverage when it is offered (BISHCA, 2000). By far the most common reason—reported by 47 percent of employees who declined coverage—was that they had obtained coverage through a spouse's or partner's employer. Ineligibility

Table D.4: Characteristics of Employer-Sponsored Health Insurance Coverage in Vermont, by Firm Size				
	<i>All Firms</i>	<i>Number of Employees</i>		
		<i>Fewer Than 10</i>	<i>10 to 25</i>	<i>26 to 50</i>
Percentage of employers offering health insurance coverage	73.5	62.0 **	74.1 **	94.0
Percentage of insured employers:				
Offering dependent coverage	90.7	90.5 **	85.0 **	96.6
Offering coverage to part-time employees	35.6	25.3 **	37.5 **	40.2 **
With a waiting period for eligibility	67.2	64.1 *	64.5 *	71.9
With a waiting period for preexisting conditions	25.5	19.6 **	18.9 **	36.3
Percentage of eligible workers taking up coverage	71.9	71.6 *	70.7 *	70.0 **
				77.5

Source: Mathematica Policy Research Survey of Vermont Employers to Assess the Impact of the Vermont Parity Act.

Note: The survey includes Vermont businesses that were in operation as of January 1, 1998 and that remained in operation as of the time of the survey (Fall 2000). The survey excluded those that had, on average, fewer than five employees across establishments in calendar year 1999 and businesses operated by Federal and State government entities.

* Significantly different from employers with more than 50 employees at the .05 level, two-tailed test.

** Significantly different from employers with more than 50 employees at the .01 level, two-tailed test.

Table D.5: Health Plan Choices Offered to Employees in Vermont, by Firm Size					
	<i>All Firms</i>	<i>Number of Employees</i>			
		<i>Fewer Than 10</i>	<i>10 to 25</i>	<i>26 to 50</i>	<i>More Than 50</i>
Number of health plan choices, %					
One	89.2	93.8	94.9	84.6	69.0
Two	7.8	6.3	2.7	11.9	19.6
Three or more	3.0	0.0	2.5	3.5	11.4
Mean number of plans	1.1	1.1 *	1.1 *	1.2 *	1.4
Percentage of employers offering plans					
HMO	19.2	21.5	19.5	14.6	17.1
POS	18.6	17.8	17.8	19.9	20.9
PPO	42.0	34.5 *	42.6 *	43.4 *	58.3
FFS	21.2	21.8	14.8 *	28.0	27.8
Unknown	6.2	6.3	7.7	4.7	3.6
Percentage with self-insured plan	15.4	10.4 *	6.6 *	19.4 *	44.6

Source: Mathematica Policy Research Survey of Vermont Employers to Assess the Impact of the Vermont Parity Act.

Note: The survey includes Vermont businesses that were in operation as of January 1, 1998 and that remained in operation as of the time of the survey (Fall 2000). The survey excluded those that had, on average, fewer than five employees across establishments in calendar year 1999 and businesses operated by federal and state government entities. This table is limited to insured businesses only.

* Significantly different from employers with more than 50 employees at the .01 level, two-tailed test.

FFS = Fee-for-service indemnity plan; HMO = Health maintenance organization; POS = Point of service plan; PPO = Preferred provider organization.

due to part-time status was reported by 19 percent, while 11 percent reported that they were ineligible due to a waiting period. Sixteen percent cited cost as a barrier.

3. *Health Plan Choices Offered by Vermont Employers*

Among employers that offered health insurance coverage, there was considerable variation in the number and types of health plan choices (Table D.5). Nearly one-third of large firms (more than 50 employees) offered more than one choice, compared to about 5 percent of firms with 25 employees or fewer.

Vermont employers were most likely to report that they offered their employees a preferred provider organization (PPO) plan (42 percent), and less likely to report offering

a health maintenance organization (HMO), either with or without a point-of-service (POS) option (38 percent combined). Only 21 percent of employers offered a traditional fee-for-service, or indemnity, option. There was no significant variation by employer size in the percentage that offered a managed care plan (HMO or POS), but large employers were more likely to report that they offered a PPO plan. These data mirror national trends in two respects—the entry of managed care into the small group market (Jensen et al., 1997) and the strong emergence of PPOs, as “heavier” forms of managed care retreat (Gabel et al., 2001).

To the extent that most employers offered only one health plan, many employees could not choose an alternative health plan follow-

Table D.6: Distribution of Vermont Employees With Employer-Sponsored Health Insurance Coverage, by Type of Plan Funding		
<i>Type of Plans Offered</i>	<i>Number of Vermont Employees in Insured Businesses</i>	<i>Percentage of Total</i>
Total	201,059	100.0
Fully insured plans only	116,950	58.2
Self-insured plans only	60,023	29.9
Both fully and self-insured plans	24,086	12.0

ing implementation of parity. Moreover, when that one plan was a managed care plan, network composition or care management strategies may have affected the choice of providers and accessibility of care. Among businesses that offered only one plan, there were significant differences by firm size in the type of health plan offered. Businesses with 50 employees or fewer were more likely to offer a managed care plan (HMO or POS) as the only option, while large businesses (more than 50 employees) were more likely to offer a PPO plan as the only option (data not shown).

Approximately 15 percent of Vermont employers reported that they provided health insurance through a self-insured plan at the time of the survey (Table D.5). Large businesses were three times more likely to offer at least one self-insured plan. Thus, 30 percent of employees were employed by firms offering only a self-insured plan, while 12 percent were in firms with a choice between fully insured and self-insured plans (Table D.6). This means that, because self-insured plans are exempt from Vermont's parity law, nearly one in three Vermont employees worked for insured businesses that were beyond the reach of the Vermont MH/SA parity law.

4. *Employer Monitoring of Health Care Costs*

The majority of Vermont employers reported that they monitor their health care costs at least once or twice a year or upon contract renewal (Table D.7). The frequency of monitoring varied by firm size, however. Large firms were more likely to monitor their health care costs at least quarterly, while other firms were more likely to report that they never monitored their costs.

About half of Vermont employers relied on outside sources for monitoring, although the likelihood of using an outside source was about twice as high among the large firms (77 percent) as among the very small firms (39 percent). Among those using outside sources to assist in monitoring, the most common sources were insurance brokers (57 percent), benefits consultants (24 percent), and health plans (23 percent). Firms of all sizes relied most often on insurance brokers, although other differences were observed by firm size. Large firms were more likely than very small firms to hire benefits consultants (37 versus 16 percent) and more likely to rely on health plans or third-party administrators (30 versus 12 percent). Very small businesses were more than three times as likely to call on trade or professional associations,

Table D.7: Variation in Health Care Costs and Cost-Monitoring Activities, by Firm Size, %

	<i>All Firms</i>	<i>Number of Employees</i>			
		<i>Fewer Than 10</i>	<i>10 to 25</i>	<i>26 to 50</i>	<i>More Than 50</i>
Frequency of Monitoring (chi-sq = 34.83****)					
Four or more times yearly	16.9	14.1	14.4	12.8	33.7
One or two times yearly	57.8	58.4	60.7	60.0	47.4
Monitors at contract renewal or other time	13.0	13.0	12.5	16.7	10.6
Never	8.2	11.9	6.6	6.5	3.9
Unknown	4.2	2.7	5.9	4.1	4.5
Percentage Using Outside Sources for Monitoring	53.4	38.6 ***	56.7 ***	58.0 ***	76.8
Sources of Help in Monitoring					
Insurance broker	57.2	53.4	61.6	62.4 *	51.0
Benefits consultant	23.8	16.0 ***	19.4 ***	28.8	36.7
Health plans	22.7	11.8 **	25.5	24.7	30.2
Trade or professional association	13.2	24.0 **	10.8	9.4	6.7
Business consultant	7.9	7.9	13.0	2.8	3.2
Other	2.1	2.8	0.4	4.2	2.8
Percentage of Health Care Costs Attributable to MH/SA Services (chi-sq = 119.97****)					
None	23.1	30.3	26.0	18.0	3.1
1–5	6.0	5.1	5.7	5.1	10.2
6–10	1.9	0.9	0.9	2.9	5.8
More Than 10	1.6	0.8	1.2	0.0	6.4
Unknown	67.3	63.0	66.3	74.0	74.5
Change in MH/SA Costs Over the Past 3 Years (chi-sq = 8.51)					
Increased	18.1	14.5	18.5	19.1	25.4
Decreased	0.9	0.9	0.9	0.9	0.9
Stayed the same	40.9	41.3	44.0	35.9	38.0
Unknown	40.1	43.4	36.6	44.1	35.6

Source: Mathematica Policy Research Survey of Vermont Employers to Assess the Impact of the Vermont Parity Act.

Note: The survey includes Vermont businesses that were in operation as of January 1, 1998 and that remained in operation as of the time of the survey (Fall 2000). The survey excluded those that had, on average, fewer than five employees across establishments in calendar year 1999 and businesses operated by Federal and State Government entities. This table is limited to insured businesses only.

* Significantly different from employers with more than 50 employees at the .10 level, two-tailed test.

** Significantly different from employers with more than 50 employees at the .05 level, two-tailed test.

*** Significantly different from employers with more than 50 employees at the .01 level, two-tailed test.

**** Distribution by firm size significantly different than what would be expected by chance alone, based on a chi-square test ($p \sim .01$).

many of which sponsored association plans for small businesses in Vermont (24 versus 7 percent).

Despite these efforts to monitor health care costs periodically—often with the assistance of outside sources—few employers were able to estimate what percentage of their health care costs were attributable to MH/SA services. Between 78 and 93 percent

of firms reported that the share of costs attributable to MH/SA services was either zero or unknown. A sizable proportion—about 40 percent—were unable to report the direction of the change in costs attributable to MH/SA services over the past 3 years. Another 41 percent reported that costs stayed the same, while 18 percent reported that they increased.



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